TO THE

MOUNTAINS OF THE MOON

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Being an account of the modern aspect of Central Africa, and of some little known regions traversed by the Tanganyika Expedition, in 1899 and 1900.

BY

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WITH ILLUSTRATIONS AND MAPS.

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PREFACE.

IT is unnecessary that I should refer here to the manner in which the Tanganyika Expedition was formed, or perhaps that I should refer again even to my own indebtedness, as a naturalist, to the gentlemen interested in African zoology who formed the Tanganyika Committee, and organised the explorations in Central Africa which I had the honour to command; I have already dealt with these matters in the first chapter of this book. It is, however, perhaps advisable that I should here indicate the reasons which led me to dissociate the contents of the present work from those more purely scientific matters which will appear shortly in another volume. When I returned from Africa Professor Ray Lankester, to whom we are indebted for the inspiration and sustenance of the whole of the researches with which the two Tanganyika Expeditions have been concerned, suggested to me that I should incorporate all of these researches, together with the descriptive and geographical matter, and my own philosophical reflections, if I had any, in one book.

Accordingly I set to work to see what could be done; but the more I tried to think out a scheme of arrangement of all these matters, which would not make the chapters both unreadable to the general public, and irrelevant and nonsensical in the eyes of the scientific man, the more difficult the task became; and I finally came to the conclusion that the problem presented by my desire to mix these different liquors in one glass, and yet make the draught either palatable or even desirable from a digestive point of view, was insoluble, at any rate for me. I therefore decided to write the present volume, which in one sense is the history of a

journey, but of a journey during the lengthy course of which I came into possession of an immense mass of observations and general information concerning a series of extensive lands and territories, which are acquiring an ever-increasing interest in the eyes of the public at home. For it may be remembered that we have heard our own possessions in the great African interior described as the undeveloped estates of the Empire, which are only waiting for the hands of the crowded-out population at home to till them, in order that the ancient forest shall at length blossom out into corn and wine. Well, it may be so, it may be otherwise; but if I were one of the crowded-out, who thought of going to till, or pursue some other avocation for a livelihood in these regions, I should be very glad if I could get an unbiassed account of the country which I proposed to adopt—that is, an account of the general aspect and character of the African interior which I should not suspect of being either coloured with the enchantment produced upon almost every traveller by mere novelty, or with the more pure special pleading which is too often apparent in the writings of those travellers who have been concerned with the administration or commercial development of these parts. Jelly-fish hunting, and the serious pursuit of whelks as a profession, will, I think, give me the necessary qualifications as regards bias, and therefore it would have seemed worth while to publish my own impressions of these promised lands on this account alone.

But besides this, the serious pursuit of whelks led me of necessity over some areas in the centre of the Continent which had never been visited before, and I had therefore, when I returned, a mass of geographical and descriptive material which had nothing to do directly with the Tanganyika problem, but which was by no means without interest in itself; and lastly, there are certain results of the scientific investigations which are without technicality, and yet are at the same time of general interest, because, as I have explained in the first chapter, they completely change our views respecting the past history of this portion of the earth. On this account I have referred at some length to the very wide geographical changes

which have occurred, and are occurring, among the lakes and water-sheds, owing to the persistence of the geological disturbances which have, among other things, formed the modern active volcanoes north of Kivu. So also in Chapter XXIII. I have dealt pretty fully with the extraordinary problem which is presented by the existence of natural park-lands, or apparently arranged gardens, in the African interior, places which at first sight suggest that the country must have been the playground of some race of landscape gardeners that has now become extinct. The substance of this chapter, and the figures which illustrate it, were in fact originally contained in a paper which I was asked to read, and did read, before the Linnean Society, and which, in the normal course of events, would have been published in the Society's journal, and could not consequently have been repeated here. Someone however connected with the publication of this journal became—well, let us say temporarily—afflicted with a fit of officialism, under the influence of which he insisted upon the application of rules which do not exist in that Society respecting the form in which papers should be presented; and I was thus enabled conscientiously to withdraw both the figures and the manuscript, and to publish them in their proper place in this volume.

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TO THE MOUNTAINS OF THE MOON.

CHAPTER I.

"What have we here? A man or a fish? Dead or alive? A fish: he smells like a fish; a very ancient and fish-like smell."

—*Tempest.*

THERE is a wearisome kind of person who, when anybody has been anywhere or done anything, is always ready to ask what useful end such work subserves; and lest any such worthy should have the misfortune to be tempted to peruse these pages further, I hasten to tell him at once that he will find no sort of answer to his queries from the beginning to the end of this book. On neither of the lengthy journeys, during which I had the good fortune to travel over a very large portion of the African interior, were we primarily in search of anything that is of the slightest use to anyone, or ever will be. In both cases we went to find out something more about the Tanganyika region, which was, and still is, a mysterious place; and both journeys, though they have occupied between them several years and cost a good many thousand pounds, grew in reality out of nothing bigger than a jelly-fish. They were small, poor little jelly-fish at that, each about the size of a shilling and nearly as flat, with delicate tentacles all round their rims, and a mouth nearly as big as their bodies. They had come to Oxford all the way from

Tanganyika in a bottle, to raise a discussion touching their nature and origin, which is still vigorous, and over which the last word will not be said for many a year to come. The potentialities for zoological discords which lay in these strange little gelatinous discs, arose from the fact that, if we except the star-fishes, and the sea-urchins and the corals, no animal is more typical of the ocean than a jelly-fish; in fact, the Dutchman who negotiated for the sale of his farm when he found herrings in the ditches, because he inferred that the sea must be leaking through the dykes, would probably have put it up to immediate auction had jelly-fish appeared as well; but, notwithstanding the strange improbability of the thing, here were undoubted jelly-fish which had been obtained by the missionaries in Lake Tanganyika, which is a fresh water lake 2,700 feet above the sea, and in the very middle of the African Continent. How they got there, and whether there might be other marine organisms in the lake, and to what past episodes in the history of Africa the existence of such animals might bear testimony, if they were found, could of course not be conjectured at the time. The only evidence of any significance which could be collected lay in the fact that there were, more or less forgotten, in the galleries of the British Museum, certain shells which had been obtained by Captain Speke, during Burton's celebrated journey to Tanganyika. Some of these shells were not like fresh water shells, but they were very like many forms habitually living in the sea, and thus, from a zoological point of view, the district of Tanganyika, as an emphatic zoölogist put it to me, literally stank of something interesting and new. It therefore appeared desirable that some naturalist should go to Tanganyika, and through the kind support of Pro-

fessor Lankester, the Royal Society eventually made the necessary grants for the undertaking, and I left England in 1895, returning in 1897. This was our first Tanganyika expedition, and as a result of it we found that the original problem of the jelly-fish had in no wise been solved; it had, in fact, grown enormously bigger and more difficult, for I found that in Lakes Nyassa and Shirwa there were no jelly-fishes, nor anything except purely fresh water forms, while in Tanganyika there were not only jelly-fish, but a whole series of mollusca, crabs, prawns, sponges and smaller things, none of which appeared in any of the other lakes I then knew, and all of which were more or less distinctly marine in type. Further than this, however, I found none of these strange marine-looking animals could be compared directly with any living marine forms, yet in their structure they certainly seemed to antecede some of these in the evolutionary series, much as a kitten may be said to antecede a cat, or a puppy a full-grown dog. They appeared to belong to some former age, and just as a tadpole, if it is kept in a glass vessel and not fed, will remain a tadpole indefinitely, so these strange animals appeared to have remained from some remote period as they were, cut off in Tanganyika from the sea.

One definite result of this first expedition, therefore, appeared to be that the sea had at some former time been connected with Lake Tanganyika, but when or how remained a mystery. The whole thing was most perplexing, and particularly so because this apparent demonstration which we had obtained, of the former extension of the sea into the very heart of Africa, was opposed to some cherished geological ideas. The difficulties of offering a tenable explanation appeared to be almost insuperable, and I felt inclined while discussing the matter before the Royal

Society after my return, to suggest as the best working hypothesis that Sinbad's "Old Man of the Sea" had found a last refuge in the lake, and that the crabs and the prawns and the jelly-fishes were sticking to him when he came up. This would at any rate have accounted for their ærial transmission, and have got rid of the necessity for a connection with the sea altogether.

The impression, however, to which I have pointed above, that the marine animals in Tanganyika must be very old, eventually bore fruit. I remembered having been struck, while still on the shores of the lake, with the fact that the shells were curiously similar to some other shells either living or extinct which I had already seen elsewhere; and after searching among the conchological representatives of the different geological eras, I found that this peculiar character, this distinctive *facies*, as the geologists express it, presented by the Tanganyika shells, was again presented by the fossil remains in the beds of the old Jurassic seas, that is, in the marine deposits of a little later date than the English coal. The correspondence between these living shells in Tanganyika and their long since extinct Jurassic counterparts is most extraordinarily complete, and something of its nature may be gathered from the figures given in my paper "On the Hypothesis that Lake Tanganyika represents an Old Jurassic Sea," published in the Quarterly Journal of "Microscopical Science," vol. xli., where the living and the dead shells are represented side by side. It will thus be seen that a considerable number of shells in Tanganyika correspond specifically with shells that have been left in the débris of the Jurassic seas in Europe, and which up to this time had been supposed to have become wholly extinct; and it will be seen further that this correspondence

gives us at once a possible solution of the whole Tanganyika mystery. The strange animals, the jelly-fishes, the mollusca, the sponges, etc., which appear in Tanganyika and apparently nowhere else, may be regarded as a relic of the time when the lake basin was in connection with the sea, and consequently filled with representatives of its ancient fauna. Moreover, the date of the lake's connection with the sea which this latter supposition necessitates is so remote, that it can, with a little squeezing at any rate, be made to fit in with the revised notions of the past history of the continent; and it has this great merit, that it gives a rational explanation of the matter without the intervention of either Sinbad or his old man.

But although in this manner we reached a tenable hypothesis respecting the nature and origin of the jelly-fish and other marine inhabitants of Lake Tanganyika, it was very obvious that much remained to be done; we did not know, for example, whether there were marine organisms in any of the other great lakes, Kivu, the Albert Edward, the Albert Nyanza, the Victoria Nyanza, or Lake Rudolph. Neither did we know anything of the geology of Tanganyika, nor of the districts north of it as far as the Albert Nyanza; whether there were marine deposits extending from the lake, and thereby conspicuously exhibiting the direction of the connection of the old basin with the sea. Moreover, the districts north of Tanganyika, through Lake Kivu as far as the Albert Nyanza and including the Mountains of the Moon, were an almost complete *terra incognita* from a geographical point of view; and thus a further expedition in this direction was to be recommended on zoological, on geological, and on geographical grounds, and it was these three wants with respect to the African interior which eventually

became the motive for the formation of a new expedition. It was organised and despatched under the auspices of a committee of scientific men in England which was formed by Professor E. Ray Lankester, F.R.S., who acted as chairman, and was composed of Sir John Kirk, G.C.M.G., Sir William Thiselton Dyer, K.C.M.G., Dr. P. L. Sclater, F.R.S., and Mr. Boulanger, F.R.S., and I had the honour to be appointed to command the expedition in the spring of 1899.

Of the technically scientific results of this latter undertaking, I do not, however, in the present volume intend to say more than is necessary to make the motives of our journey intelligible, and to give interest to certain parts of it which might otherwise seem purposeless. The details of these matters will be discussed in another book. In the present, I have the much more easily obtainable ends in view, which arises from the fact that all journeys that have been followed far into the interior of unknown countries have, besides their original object, a value hardly less real or important in the knowledge which they bring to light of the physical individualities of the regions through which they pass. For to every region in the world there is an individuality peculiar to itself, which stamps the place and stamps the people in it, like the individuality which overspreads the Italian Campagna, and which so many artists and men of letters have attempted to delineate, or the singular individuality of the quiet deserts, with their intense colour and their shadowless wastes of sand; so again there is an individuality, or, if you will, a being which pervades the melancholy moorlands of the north; and no less are there other and equally attractive types of country almost innumerable in the rich warmth of the great African interior. Nowhere

else in the world have we such an expanse of land under the tropics, or consequently so many combinations of physical features under conditions which are utterly unlike anything occurring in temperate climes, and yet how little has been done to make the nature of these places really tangible to Europeans, among whom one generally finds the idea prevailing that all Equatorial Africa is a desert-like expanse of very yellow sand, covered with palm trees and antelopes. In what follows, therefore, I have simply attempted to look closely at the countries as they are, to smell them and taste them, and live over again for a time in the warm, luxurious winds of their boundless landscapes.

Yet, further, it will be seen on looking at our route on the map, that we covered a very large portion of the equatorial interior, and as we did this of necessity in a somewhat slow and leisurely manner, looking for what we could see, we had almost unique opportunities for becoming sometimes painfully acquainted with the virtues and the shortcomings of an immense hitherto almost unknown area, an area which is, however, gradually assuming greater and greater prospective importance in the eyes of the people at home. This country, the high interior of the African Continent from the north bank of the Zambesi river to the sweltering swamp lands of the Upper Nile, is in fact at the present moment one of the great apples of the world's eye, and the representatives of the different countries have for some years vied with each other in their efforts to beg, borrow, and steal portions of its already thickly populated districts for their respective governments. The question of the strange dusky peoples who already inhabit these territories and their rights therein have never been discussed, and, until they turn

some other colour or disappear altogether, probably never will be. But for all that, it is apparent to those who have seen through the glamour which surrounds the more or less unknown, that these same dark peoples have a sort of divine right to their possession, in virtue of their immunity to malaria and the other incidentals of a tropical climate, which the white man may find it difficult to overcome. Thus the coveted apple of the African interior, though coloured with all the hues of its tropical sky, and cooled in places by waters from its everlasting snows, is after all somewhat of the nature of Eve's, and the attempted digestion of it by Europeans may lead to the discovery of evil properties, showing that the fruit is a forbidden one, except for certain kinds of men. In this way, beyond their original objects, journeys in the remote interior of Africa, that have no political or commercial objects, have also a certain value, in that they afford a means of giving an unbiassed account of these countries as they really are, by means of which, if the Author does his duty, anyone can form for himself an idea as to what can or can not be made of them; while above and beyond this merely useful aspect, they afford, as I have said, to those who will never be there, a more or less distinct view, and a more or less real knowledge, of great countries which have remained as they are now for centuries, crowded with barbaric human life.

Nowhere, at present, can one so completely realize the melancholy attributes of the past history of mankind as in the little African villages, where the people are still living among the wild elephants, hippopotami and great reptiles, and chopping their firewood with similar axes to those that were used in the prehistoric ages of Europe. Nowhere is one more profoundly awed by the gigantic

shadow of the past, and not let down as it were gently into the lapse of time by the recorded history and ruin of man's works, as in these countries which have no history, except that which appears in the scoring and denudation of their lonely mountain masses, and the formation of the endless plains of alluvium at their base. To those who know the country, moreover, there is an endless fund of humour in the untutored savage, which should not be lost; yet even now his original character is rapidly passing away before the introduction of more familiar ideas, like that of the aboriginal Australians, over whose degeneration and decay my friend Professor Spenser has lately so eloquently lamented. It is indeed extraordinary with what smug complacency the so-called emissaries of European light and learning can sit down to utterly destroy in these countries that which is of the utmost value to the understanding of our own early history, and which, after it is once gone, will never be seen on this earth again. Unfortunately the native assimilates only far too quickly European customs, until he is no longer of any interest to anyone, except the local magistrate before whom he constantly appears. In his own life he has the attributes of antiquity, which make him both funny and genial even in his grim brutality, and thus the native and his country together form a combination which has fallen like a spell and made an indelible impression on every traveller who has come under its influence. So strong indeed is the vision of the remote past which the human features of the interior call up, of that which was once even here in Europe, but which is now utterly forgotten, that the traveller emerging from it back into the hurry of modern life is for a time "as one who has been stunned and is of sense forlorn."

In the following chapters I have therefore endeavoured to give some impression of this, the only country which could produce such an effect, and which in its beloved original savagery is rapidly and for ever passing away; for we must remember that even a few years hence some of the dark, slumberous forests, where the monkeys and the turacoos screamed over the first white man they had ever seen as we passed beneath, may soon be desolated by the noise of mining camps and the abominations of tin shanty settlements; so also the genial naked savage, who gave us his milk and his goats and his corn, will be turned by the missionary and the young administrative gentleman into a pauperised black in breeches, sans virtue, sans vice, sans everything.

CHAPTER II.

"——and so we sat and sat
And talked old matters over; who was dead."
—TENNYSON.

AT last, on the 8th June, 1899, we finally crossed the surf-swept bar of the Chindé river and came to anchor in the quiet water just within the river mouth. It was the third time I had visited the place, yet I still found something keenly interesting in the remote delta haven; for although it is in no way particularly beautiful, it has formed the starting point or the end of a large number of African enterprises, and it is also the last resting-place of more than one well-known African pioneer, Stairs among them.

The wretched little town is a collection of tin and mud huts, scattered along the southern bank of the river, which is not the Zambesi, by the way, but a branch of it which wanders off by itself and opens by a separate mouth. Seaward there is a strip of bright green marsh, bounded by low dunes of blown sand, while inland the dark, swiftly-moving water of the river is bounded by a dense fringe of sullen grey-green mangroves, and beyond these again rise the heads of the great Borassus palms, marking the dryer places in the inland swamps.

Chindé has nothing but sand to rest upon, and the sand is so soft and shifting, that in the three years since I was here before, the old consular buildings and a tennis court had been completely washed away. From the steamer's

boat one steps on to a shore of deep, black, sticky mud, and from this the fiery sunshine extracts a peculiar heavy marshy smell, and there are no roads; but, as in the old days at Beira, planks placed end to end serve for footpaths from house to house. At whatever time one lands there is no question that Chindé is hot and damp, and the sky from year end to year end has the dark unchanging blue only sometimes rivalled on a hot day in Southern Europe. It has, moreover, the same peculiar cloud-shapes for ever drifting across it, clouds that in the rainy season gather into sullen thunder squalls that disappear as quickly as they form. At such times the miserable native huts and the European shanties are suddenly shut out by a thick veil of blank rain, only as suddenly to reappear glittering and steaming in the floods of fiery sunshine which follow the storm-clouds as quickly as their shadows.

By night, however, the fireflies and the moon enchant the place, turning the drunken little camp, for it is nothing more, into a strange fairyland of still, blue light and clouds of floating sparks. The air grows cool and pleasant, and over the shrill chirp of the grasshoppers and frogs, there comes the slow booming of the great ocean on the sand without.

It is to this little sweltering tin-roofed hell, buried in the swamps of the Zambesi, that the river steamers come down, chiefly laden with sick Europeans, who have succumbed more or less completely to the deadly fever of the interior, and always at Chindé one meets a number of pale anæmic people, who are waiting to get away lest they swell the ranks in the neat little cemetery outside the town. It is on this account that Chindé has got its evil reputation, although in reality it is not nearly so unhealthy as the inland districts, but people wrecked by the interior have too often

come down to it to die. To anyone who has never been in a fever-stricken country the first sense of the presence of this unseen foe, the feeling that everywhere in the sunny scenery there lies hidden a mysterious evil, is somewhat exhilarating, and you closely examine the ordinary-looking ground, the bright green strips of marsh land with their flowers, and bees and dragon flies, to see in what it is this hidden thing may lie. But after the glamour of novelty has departed, Chindé gradually settles down into a place of gloomy memories, of uncomfortable and sweltering actualities, and generally into a place from which it is well to hurry away. It is, however, by no means so easy to get away from Chindé as one might suppose. In our own case, the baggage of the expedition had been landed together with about seven hundred tons of cargo, chiefly European stores and provisions, and all this stuff was piled in a great heap inside the fence of the African Lakes Corporation Limited, and so before it could be sorted out I had ample time to wander about among the surrounding swamps, and for this I was not sorry, for if there is one place more interesting than another it is a maritime African swamp. One can enter them in a boat, pushing as far as possible up the questionable filthy creeks until the boat grounds, after which it is necessary to climb out over the ærial roots of the mangroves, on to a flat, black, muddy apology for land just on a level with the high-water line. The place is a sort of wood, the trees forming a gloomy screen to the sunlight, and their bare trunks stand like endless rows of dusty pillars above the ground, which is covered with scanty filthy grass, like the bristles on a pig's back, and about a foot high. The ground is alive with crabs—on every inch there is a crab, the smaller

ones cracking under your feet as you walk—big crabs and little crabs, symmetrical crabs and asymetrical crabs, brown crabs and black crabs, and crabs with one arm as big as the rest of their bodies, which they keep most brilliantly coloured and polished, sometimes crimson, sometimes green, and sometimes blue. They are all terribly afraid of each other and the intruding stranger, and rattle and scuttle along sideways over the mud in every direction. But there are other things in these dim, hot mud forests besides crabs; between the grass stalks and between the mouldering tree trunks are tough sticky webs, in the centre of which hang large fat-bodied spiders waiting for the flies which buzz about the trees and over the dead fish in the creeks, where also amongst the mud are grotesque little live fishes, which walk about on their front fins, with their eyes on stalks, and which rejoice in the euphonious name of *Periophthalmus.* The air has a sickening graveyard smell, and everywhere, clinging to the underside of the leathery leaves, there are huge mosquitoes with long legs striped brown and white. Again on the trees, cemented to the twigs, are strange little truncated shells, which are not snails, but contain semi-aquatic molluscs, and in the creeks among the fish which flop over them and about them there are huge Potomids lying about like fir cones in the slimy mud. These molluscs are very interesting in some ways, for their structure is similar on the one hand to the *Melanias*, a fresh water family of molluscs, and on the other to the *Cyrithidæ*, which are wholly marine. They therefore represent what is probably one of the stages by which the marine Cyriths were converted into the freshwater Melanias, for they live in both salt and fresh water in the swamps as the tide rises and falls.

From the charm of the swamps and their peculiar features, I had eventually, however, to return to Chindé and the confusion which I had left there on the hot beach, to see what progress had been made for our departure, and I found, as I rather expected, that this progress amounted to nothing at all. The whole of the cargo lay still piled in a great heap hopelessly mixed, and as two river steamers were starting up stream next day, I requested the local manager of the African Lakes Corporation to lend me someone who could help me to sort out the two hundred and fifty odd loads belonging to the expedition. This individual was forthcoming in the shape of a young Scotchman, who arrived in a frame of mind more jovial than was to be accounted for by the surroundings, and which from a certain huskiness in his speech had evidently proceeded from a liquid source. He brought a number of lazy grinning niggers with him, and I pointed out that if the loads were moved in a certain manner we could see where our things lay without the trouble of sorting the whole vast heap. So we began, and were getting on better than I expected, when the Scotchman disappeared, to return in a short time more bland and pleased than ever, and with all coherence of speech departed. It was curious to watch the effect of his potations on the natives. They knew quite well he was drunk, and would do nothing but laugh when he told them to "timinusa" everything, by which I think he meant to say in their own language "turn everything over." And so he spent the greater part of the hot afternoon, alternately maudlin in the sun and then relapsing into paroxysms of inebriate wrath, in which he bawled at the men to "timinusa" so frantically that everything got once more into confusion, and by 4 p.m. the muddle was as complete as when we

started. I therefore lit a pipe and went down the river to see Captain Sharier, who was with some of the new Yaw troops, and all the way, getting fainter and fainter, I could hear explosions of "Timinusa! Timinusa, you devils! Timinusa, won't ye?" from my Scotch friend on the beach.

Eventually, on the day but one following, we did get away with all the loads belonging to the expedition in two iron barges lashed one on either side of the steamer. We left in the afternoon, and there is something always strange and unexpected in the sudden change which comes over everything as the steamer leaves the coast. A new world gathers round the little jangling craft; with the same suddenness and completeness as did Childe Roland's plain after his interview with the cripple. Only the blue sky and the monotonous sunshine serve as a connecting link between the ocean world without and the continental world within. In fact, no sooner has the steamer passed the fringe of mangroves which stand like warning sentries before the mysteries of the interior, than the river and the whole world assumes the very character of the interior itself. The dark-coffee coloured stream glides silently past the great river banks, which are now no longer muddy, but covered with tall yellow grass and draped with a variety of brilliant convolvuli, bushes and trees. Over these again rise the long slender stems of the Borassus palms, with their heads bending and clattering in the warm breeze, while ever and anon appear great baobab trees, their sausage-like limbs hideously stark and bare against the sky. On all sides open evil-looking creeks full of tall reeds, lake lettuces and water lilies, and in the course of the stream itself strips of bright yellow sand run out from either bank. At first sight these sand-

banks appear to be covered with nothing but a few reeds and tufts of grass, but after a while it is noticed that there are other things lying about on them which are akin to neither. These bodies are scattered in groups along the sand as if they were trees felled in all directions by some frantic woodsman, very long ago, for they are all rotten-looking and moss-grown, and covered with green weed. As we come nearer, however, these logs display extraordinary properties, for one by one they begin to move a little this way and that, and then glide with a strangely stealthy quick wriggle into the water, so that when the steamer passes within close range, there are only one or two great crocodiles sleeping more soundly than the rest to mark the place where the school, or herd, or what you will, once lay.

Crocodile shooting is an attractive diversion on a journey up a river such as the Zambesi, for although they are quite easy to hit, it is not at all the same thing to hit them in such a way that they drop where they are shot, and do not wriggle down into the water and get away. Most people, I believe, have an idea that crocodile skins are difficult to pierce with bullets, but I have never found this to be the case. On the present journey I shot several with split bullets from a ·303, and if the shot was properly placed, the huge brute simply curved once or twice rigidly from head to tail and then lay quite still. Once on my former journey up the Zambesi, while the steamer was tied up at a little village on the bank, I came across a crocodile asleep on a sandbank round a corner in the stream, and I fired three shots at it before it stopped wriggling off towards the shore. The first happened to be a solid bullet, the second a soft-nosed, and the third a split-cased Jeffrey bullet which I had

placed in this order in the magazine. When I approached the brute, blood was flowing from its mouth and it appeared to be dead, but when I began to move it by the tail it suddenly opened its huge jaws and made such a sounding snap in the air that I thought it advisable to leave it for a time to get really dead, before examining where the bullets had gone. When I returned it was quite limp, and I found that my three bullets had all entered about the right shoulder. The solid military ·303 had bored a clean hole from the shoulder through everything to the lower part of the neck, on the left side, and had there passed out through an aperture about an inch in diameter. The fate of the two expanding bullets was, however, very different: the soft-nose, becoming flattened out on the head of the scapula, had smashed the bone and had lodged in the upper part of the left forearm; while the split-cased bullet had splintered wholly to pieces, its fragments flying in all directions like those of a shell; one of the pieces of nickel casing was even in the roof of the mouth, having flown through the throat and tongue after its first impact on the shoulder blade.

It was already night before we reached the end of the Chindé river, and as we ran out of it the vast Zambesi appeared like a boundless sea in the still flood of moonlight that bathed alike, the gleaming water and the dark features of the distant swamps. Night on the river at this time of the year is deliciously cool, even chilly at times, and it is almost impossible to realise that the scene is in one of the most pestilential districts of the whole world. In the cool season mist often envelopes the lower reaches of the river before dawn, and when we woke on this particular occasion the scene had narrowed to the grey indistinct outline of the barges, and the bank to which

we were tied, the thick cold mist having wrapped all else up in its white malarial pall.

Shortly after reaching the Zambesi proper there appears on the left a low forest-clad rise, and among the trees on the river bank there are a few tin roofs painted a brilliant red. These roofs mark the site of Shupangu. It is a somewhat interesting place ; for the river has here made a deep cutting, and along the exposure the substratum is seen to be composed of conglomerates and old coral, so that it appears that this place was once on the sea coast. Moreover, the rising ground is covered here with gigantic forest, real primeval forest, and not the scrubby apology for it one so often meets with in Central and East Central Africa. On penetrating a few miles inland the huge trees are found fallen in all directions ; those that are down laced to the trunks still standing by creepers, and in the still, hot aisles between their lofty stems there is the deep gloom of the true primeval forest, and also its peculiar smell ; it is a strange mixture of crushed leaves, rotten leaves, earth and green mould, all blended together and mixed with the scent of flowers and the odour of toadstools and mushrooms. There is, moreover, an intense damp heat in the forest by day and a dense clammy fog by night, which wraps its dark gigantic features up in a thick impenetrable hush.

One realises here, perhaps for the first time, the potentialities of the tropics as manufactories of the products of putrefaction and decay, and of that peculiar combination of a hothouse and a graveyard which so much of the low seaboard of tropical Africa presents. Here, too, one finds that the fresh sea wind has gone for good, that the heat is very damp and enervating, and that it is a distinct effort to walk even with the genial and hospitable French Fathers to their

monastery, a few hundred yards beyond the beach. Moreover, on reaching this point on the Zambesi it is also apparent that mosquitoes have arrived, not by twos and threes as at Chindé, but by hundreds everywhere—in the trees, on the grass, on the steamer, and always inside the mosquito nets in the cabins, their shrill music keeping one in a state of restless wakefulness throughout the greater part of the hot night.

If it is not foggy, morning breaks over the vast delta in an intense hush, which seems to cling like the shadows and the dew to the surface of the swamps; the east becomes brilliant, and the tall Borassus palms stand out in fantastic attitudes against the brightening sky; but all between—the pale sheets of water, the flat expanses of yellow and green grass—are still, and for an appreciable time remain wrapped up in the great shadow of the earth. This time is of the gods, but unlike them it is short lived, and almost before one has grown accustomed to the light the sun is up and fiery, and thenceforward it is the pitiless brazen tropical day. One thing that is always extraordinary near the Equator is the force of the early sun. No sooner is this baleful luminary above the horizon than his rays strike sideways like a brickbat, slanting under awnings and into cabin ports, and sweeping the whole world with a yellow fiery flame. In these low countries, from sunrise to sunset there is no remission of the heat, the sun goes higher in the sky, and roofs and awnings become of more avail as protection against his rays; but as the sun rises so does the temperature of the atmosphere, until by noon the river has become transformed into a colourless, shining, oily vapour bath, with the blue air arched above, and the sun-shrunk little steamer churning in between. Out of this universal heat and glare,

as one passes on, come occasional glimpses of the land beyond the river banks; there are great trees standing contemplating the black shadows round their feet in wide, park-like expanses of yellow sun-scorched grass, and here and there are little groups of delicately-limbed buck, their heads raised above the grass and their ears pricked towards the steamer as she lumbers by.

So day passes on the Zambesi from year end to year end, in sweltering glare and wretchedness unspeakable; only now and then is the brazen glare of the heaven above overshadowed by ominous thunder clouds, from the centre of which pour deluges of black rain; or there is no rain, and the dry rattling vegetation of the river banks is swept by dust storms and sudden tornados of fiery wind that follow the shadows of the clouds.

Towards evening on the fourth day of our journey we passed a sugar plantation, and the French manager and some of his staff came down to look at the steamer and hail her captain and engineer. These men did not look well; they had a played-out, yellow, bloodless aspect, and, like all the European dwellers in the Zambesi valley, seemed utterly worn out, their old vitality all gone through the inroads of a still mysterious disease. Everywhere sooner or later the white faces in these districts tell the same tale of the continuous assaults of fever, sometimes in the form of isolated attacks, sometimes as remittents, sometimes as ague, sometimes in the deadly form of blackwater, the worst of all. These things, and the pathetic scraps of local history which one hears at the settlements and forts, give a very enduring impression, that the Zambesi valley is not a white man's country; it is, in fact, as I heard it graphically described by an inhabitant, "'Ardly fit, sir, for a self-respecting dawg."

The valley of the Zambesi extends like a great wedge far into the interior to the west, and, together with the valleys of its upper course, seems to form a vast natural divide between what may be termed temperate Africa to the south and tropical Africa to the north. About a hundred miles up the stream, the Shiré river enters the Zambesi as a broad, navigable river, about the size of the Thames at Westminster. Like the Zambesi the Shiré winds its lower course through wide swamp lands, which form another V stretching in a more northerly direction as far as the first highlands of the interior. As the steamer ascends this stream there come into view, over the flat broad expanses of brown, yellow and green marsh, at last hills; their outline is rocky and steep and they are covered with little trees, and in the dry season of a soft brownish purple colour. They rise abruptly from the vast swamps in successive ranges one behind another, toward the north and west, all forest-clad to the top and presenting the most strangely picturesque silhouettes against the raw blue sky. Though forest-clad, these hills carry a very different sort of forest from that of Shupanga; there is here little soil, and what there is is more or less annually swept away by the torrents and floods of rain, which pour off their steep sides for more than six months in the year. The trees are small, stunted, and rarely old, averaging about the dimensions of a forty-year oak at home. They are at all times shadeless, and in the dry season as leafless as a young English copse in February. The abrupt transition from the river marsh-land to this fringe of wooded hills is very curious; in one place, where the stream bends round a sharp spur, the swamp on the right-hand bank abuts directly on the hill beneath the leafless trees, and the forlorn waste of reeds and mud,

lying against the beautiful, crisp, wooded hill, is as incongruous to our European eyes as an iron foundry would be in an English park.

Just as we pass suddenly from the world without into the swamp world of the Zambesi, so we pass abruptly from this into the hill country of the interior. The river swamps contract into narrow strips of sloping park-land, which are bounded by the hills on either side the stream. The river itself also becomes more like the rivers of temperate climes, and in many places the great dark trees about its banks make it look really very like the Thames at Wargrave or some such place. It is, in fact, as if we were to enclose such familiar scenery with the wild rugged outline of high wooded hills against a balder, and a bluer sky.

After passing Port Herald and Chiromo, both administration stations in the British Central African Protectorate, the steamer eventually pulls up for good at a place called Chikwawa, immediately below the first of the successive Murchison cataracts, which effectually bar all further progress up the stream. Chikwawa has a deservedly evil reputation, and, outside the shady administrative enclosure, has the most forlorn and woe-begone appearance imaginable. The ground is whitish baked river mud, in which there are innumerable holes, filled with foul water and harsh reeds. The banks of the river are of the same bare crumbling mud, and the land is covered with scanty coarse grass, alternating with clumps of scrubby trees and patches of green, stinking marsh. In the bald hot sunshine the whole place looks "desperate and done with," and towards the north this unsavoury plain is shut in by the hills of the Shiré highlands.

To reach there from Chikwawa it is one long day's

march, over a new road which winds up over the hills, and shortly after leaving the plain one meets a traction engine, of which great things were expected; it was put together on the river side, but it never negotiated the steep gradients of the road. It is, however, an ill wind that blows nobody good, for it forms now an excellent place for clouds of hornets and their nests. A little further on there is a rest house, belonging to the African Lakes Corporation Limited, in which they liberally supply the unwary traveller with tinned provisions which have long since grown too old to be disposed of in the Blantyre market. One small tin of jam which I bought there had been in the country eleven years, and its contents had the appearance and consistency of putty.

Blantyre is reached about sundown, and the place is said to be, and perhaps is, the commercial capital of British Central Africa. At any rate it is a place where there are stores, which supply the coffee planters and the missionaries and the administrative agents, and any other unfortunates who may be in want, for the cash which they bring from England. Nothing, so far as I have been able to ascertain, pays to export, with the possible exception of coffee, and with respect to this product there are diverse opinions afloat. Whether it has ever paid as a product is difficult to say. The crop seems to be irregular, the rains are also, and I have heard more than one planter say that any money which has been made out of coffee has been made by selling old plantations to new comers who were inclined to speculate.

Blantyre is three thousand feet above the sea, and the air feels deliciously cool after the heat of the river; there is, moreover, a certain charm in the forest-clad hills which look down on the little town. The place itself is, however,

detestable, with all the worst features of the now so well-known tin shanty settlement, where you eat goat and tinned horrors and have nothing to do, and where there is a good deal more than the ordinary gossip of an English village besides. The roads are bad, and the horses which have run the gauntlet of the fly belts, in the low country, for some reason all gradually assume the appearance of animated hair trunks. There is no game within a day's march. The surrounding forests are hopelessly monotonous to anyone but a botanist or a bug hunter, and they are not particularly good for these. The great height of the country makes the climate cool and even cold, but for all that fever is very prevalent; it attacks everyone in the place; it even assailed the members of the malarial commission in their own quarters, on a little hill. Over everybody—and this is one of the most detestable features of tropical Africa—there is a sense which lies like a blight, that men who are here to-day and ought to live long, may not be here to-morrow; and it soon becomes very obvious to the disinterested looker-on, that the white is here making a terribly uphill fight against conditions over which he has as yet got no control.

This I know is not the opinion which is generally held at home. We have argued from analogy, that as Ceylon, etc., have become healthy after colonization, so will the African interior; and further, since a great portion of the more remote interior is very high, we have assumed that it is healthy already, and only requires opening up to form an excellent dumping ground for the surplus population of European towns.

When the British Central African Protectorate was taken over, England made herself responsible for the government and well-being of a black population in an

area about the size of France; and four years ago, when I first visited the country, the attempt to bring order out of the ancient chaos in this place was being vigorously made by my kind friend Sir Harry Johnstone, and on returning I found that the order which he inaugurated had extended over a great part of the protectorate, giving one the impression of a civilised home built on a powder barrel.

Though pleasant to look at, especially from the distance of the arm-chair politician at home and the dreamer after new Utopias, these toy governments, which in several places in Africa have now as it were been clapped upon the backs of the much administered and much enduring black, have after all an aspect of utter unreality about them which cannot be shaken off. The forces of dissociation and destruction, latent in these old races that we seek to improve, and which have again and again reduced their own national organizations to chaos, still smoulder on, and wherever they are held in check by a conquering white race, and order is forced temporarily upon the unstable interior hordes, such districts at once become threatened by all the horrors of our worn-out civilization in an acute form. Safety brings an influx of destitute and defeated tribes, and the spectre of pauperism follows over-population as surely in these wildernesses as it does in London or Chicago. The old impasse of famine is indeed already beginning to present itself as a thing to be reckoned with in the future of our African possessions, in the same way that it has in India, and from the same cause. When the starving black and the starving Indian appealed to their own gods, the gods were of brass and wood, but when the same Indian and the same black inform a supreme government that they are not only starving but partially Christianised, what is a supreme government to do?

CHAPTER III.

> "Then came a bit of stubbed ground once a wood,
> Next a marsh, it would seem, and now mere earth
> Desperate and done with :——"
>
> —BROWNING.

FROM Blantyre to Zomba it is forty miles or thereabouts, and there is a good road all the way. The inhabitants think no end of it, for it is a real road, and not a blazed track, or what Americans call a dirt track. It runs through a picturesque country, beneath great rocky mountains, where there are open grass patches and clear brooks leaping over stones like an English trout stream. The whole country looks singularly European: there are the same woods, the same fields, the same great shady park trees, all exactly as in our own European vegetation; but when closely examined, every single component of this mimicry turns out to be something quite different from its European analogue, not even the grasses and the ferns are similar to those of Europe; indeed, if one wanders for miles through this curiously English scenery, there is hardly a weed or a flower or a tree specifically similar to those which, by living in the same way in Europe, produce the same scenery. There is, moreover, a deep unfathomable blueness in the sky and a gorgeous massive whiteness in the clouds, that in endless ranks sail steadily across it, quite different from anything in

regions nearer home ; while even about the seeming trout-streams, we find the willows replaced by groups of rafia palms, with leaves clattering in the wind, sixty feet high, and out of the midrib of which you can make a light pole, strong enough to carry a man in a hammock when he is tired or sick.

The road through this cool and pleasant country—cool because it is so high, and pleasant because it is like the European scenery with which we are familiar—ends under the great mountain mass of Zomba, which rises above the surrounding forests to a height of about seven thousand feet. It is beneath one of the steep wooded faces of this mountain that the administrative head-quarters of the B.C.A. Protectorate have been established for some years. The picturesque old Residency, which reminds one of the Château of Chillon, was built by Consul Hawes and afterwards embellished by Sir Harry Johnstone, who added a beautiful tropical garden, with a long green lawn of dop grass and an aviary full of ducks and geese.

The mountain of Zomba commands a superb view over the Shirwa plain. This plain is bounded to the south by the towering mountains of Mlangi, and to the east by the detached mountain masses in the northern portion of the province of Mozambique. It is really continuous on the west with the old lake deposits of Lake Nyassa, and there is very little doubt that the Lujenda river originally sprang from the intensely salt waters of Lake Shirwa, which now occupy the lowest portions of this plain.

I have always had a kindly feeling towards Lake Shirwa ; it was the first great African lake which I ever saw, and its water, which appears like a gleaming streak over the dark forest-clad plains around Zomba, is one of

View near Lwandi on the Upper Shire River with Bananas stripped by Locusts.

[*From a Sketch by the Author.*

the many beautiful features which make up the sublime views obtained from that administrative camp. From this civilised oasis in the wilderness, Shirwa is about two days' march, through a country which is at first thickly wooded and hilly, but afterwards gives place to open park-land and then to plains of yellow sun-scorched grass. Over these plains as one nears the lake several steep rocky copjes appear, covered with dark forest and contrasting strongly with the yellow expanses of the plain. There is a good deal of game on the lower and more remote portions of the plain, and near the lake itself there appear typical marsh trees, such as the yellow-stemmed acacia and the eternal borassus palm. During my first expedition I visited Shirwa in company with one of the Zomba staff, and on the second day we camped near the lake, on a patch of low but tolerably dry ground, where there was a village, and as the sun set literally clouds of mosquitoes rose, filling the profound gloom which was gradually wrapping us up with a faint murmur, like an undertone of the lake surf which we could now hear distinctly breaking on its shore. Early next morning when the east was still savagely red, we set off again, and about seven o'clock reached the actual shore of the lake. The wind was freshening from the north, and the lake surface was ruffled into sheets of crisp dancing water, which broke in white surf along the yellow and pink sand-bars that ran into it beyond the belts of reeds. Straight before us rose a rocky island several hundred feet in height, and separated from the land by about half-a-mile of open water, while to the right of it there appeared an endless sea of reeds. Everywhere there were hundreds of water-fowl, flocks of ducks paddling about among the reeds, together with spur-winged geese, and cranes and storks of every description.

They were not in the least afraid of us, and I shot one large goose and several ducks, with a ·303 rifle, before they made any attempt to go away. We had approached the lake at this spot because Major Forbes had left a boat there a year or two before, in charge of the chief living on the island, and by dint of much gesticulation we eventually succeeded in attracting the attention of the islanders, who put off in this and some dug-out craft. They were a wild-looking lot, with shaggy hair greased into pipes, like those of a black French poodle when it is unclipped. When the boats arrived we crossed over to the island, and a group of the inhabitants picked up the loads, tents, etc., and we set out for the other side of it, so as to be able to get a view over the lake and decide upon our route. Though beautiful to look at, this island turned out to be a fearfully hot place; its lower slopes were covered with dark red rock, among which there was much porous black lava, which radiated the heat for all it was worth; among the rocks there were some huts and some patches of roughly cultivated ground all terribly dusty and sun-scorched; indeed, the whole island had the same ancient barrack-stove appearance which has been so aptly used to describe Aden. On the terraces of the rock above us there were immense baobab trees, the trunks of some of them more than three yards in diameter, and as they grow on every ledge of rock to the top of the island, the weird aspect of the place may be imagined. On reaching the east coast of the island, however, Shirwa completely changes its face; instead of the pretty outline of the sparsely wooded island there now faced us a limitless expanse of thick, whitish-green water, over which the blue distant mountains sat like shadows on a confused glare of mirage reflections above the surface of the lake. The immediate shore was of

impenetrable black, stinking mud, and immediately beyond it a sea of reeds stretched far out into the salt water of the lake. The day had become dark and blue with a few gigantic cloud-shapes moving slowly over the great mountains to the south, and boding later deluges of rain. In fact, the contrasts visible from where we stood were extraordinary ; on the one hand there were the green trees and dark-red rock steps of the island, looking for all the world like some enchanted garden bathed in the sunlight of a fairy tale, while on the other side lay the loathsome beach of the lake, its mud trampled into innumerable cakes that glittered in the fierce sunlight, and beyond this the endless reeds and water, forlorn and flat, and dancing with fiery heat as far as the eye could see. Only in one place was the pale, hot monotony of the water broken, far away to the north-east, where a solitary steep and apparently utterly barren rock ridge rose above the mirage and was hull down below the waters of the lake. It was yellow and seared by the sun and the rain like an island in the Red Sea, and to it we determined to go, for we should then see what the open lake was like, whether it was deep and what fishes were in it. But here, for the first time, the native character obtruded itself among the decisions of the white man, and I thought it would end in our wild-looking islanders refusing to go at all that day. The boat was rowed with paddles, and the paddles were the property of individual men. They had each been made by a particular method and of a particular design, and each was bedevilled in a particular way, so that no man could row without his own paddle, nor yet without going away among the villages and huts to ask what his step-daughter's sister thought of the white man's ears, and whether it would rain the

week after next. Moreover, the ladies of the island had taken violent fancies to some of my men and the forcible separation of these couples led to the most tragic scenes, besides causing the chief to interview us solemnly concerning the amorous disposition of our porters, and generally to talk to us after the manner of a father. However, after a great deal of hot fuss and a great shouting at the top of everyone's voice, which lasted for three mortal hours, we did eventually get away in the boat and two canoes, amid a clamour beside which Babel must have been a quiet and domestic scene. Every soul on the island stood on the beach, and men and women shouted at the utmost power of their lungs as long as they could hear the boats' crews shouting in return. It was terribly hot in the boat, and as one's deafened senses returned, we found that the reeds extended for miles, shutting out what wind there might have been. So wide indeed was the belt that we did not get into the open water before eleven o'clock, and as we passed out between the patches of waving stems, which bent to the slight swell and rustled along the side of the boats, we disturbed hundreds of pelicans, which glided away from the clamour of the boatmen, while numberless bare-headed storks solemnly regarded our approach in rows among the reeds. When we got into the open water the wind freshened and there were quite big waves on the shallow, warm, thick salt water of the open lake. They were big enough at any rate to inspire the chief's son, who was in the boat, with a most profound respect, for he enquired repeatedly, if in the white man's country I had ever seen waves like these. I told him we had, and he pondered the matter deeply, taking quantities of snuff, after which he said we had better go back, for the island would keep getting further away the further we

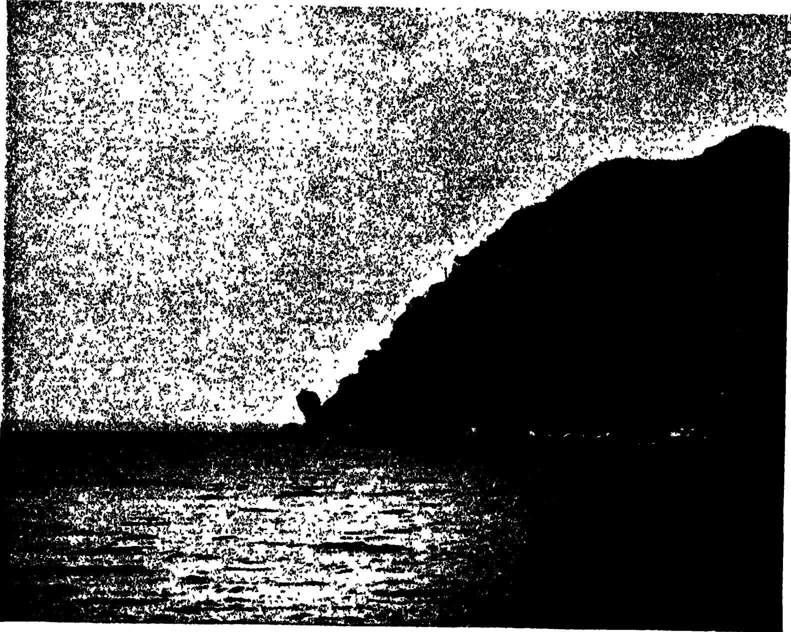
went, but we smiled sweetly at him, however, and continued to go on, when he became melancholy and silent. I think he was rather sea-sick, as a matter of fact. It was, however, a very long pull, much further than we had thought, and the sun was already low in the west before the actual coastline of the island showed itself in a line of low dusky bush. When we came near this shore, evening had already sunk over the strange watery wilderness around us, in truly tropical depths of purple and gold, and long before we reached the rocky coast of the island, that now loomed up steeply ahead, the heat of the rocks themselves could be distinctly felt like that of a stove, although we must have been more than a mile from the shore. As we drew near, the people on the island answered the boatmen's song with a wild chant, and we finally landed amongst the dusky outlines of rocks and scraggy trees. The natives were a poor-looking set, more like the gargoyles on Notre Dame than anything else; they carried torches of dried wood, and the island was the very hottest and most detestable place I ever set foot upon. An old man led us, panting and perspiring, up the steep rocks, which were five or six hundred feet in height, and all the way the ground stank of fish and other things unspeakable; in fact, there was no room to step amongst human filth of every description, and the stench on the top of the island was not unlike but surpassed that of Gorgonzola cheese.

Among the dark outlines of the trees which grew on the top of the island there were a number of huts, and among these, we found a place for a tent where the ground seemed the least animal in consistency, and sat down in the hot dark to wait till our food was cooked, amid a circle of strange black shining forms that crouched upon their haunches and regarded us in the firelight, or flitted about

among the trees. I had not been there very long, however, before it became apparent that some large active thing was inside my breeches and there was another down the back of my shirt. I sat on, however, in a cold sweat, for I dare not move. Presently there was a loud yell from my companion, and I found that he too had become aware of the presence of strange things inside his clothes. He was more courageous than I was, however, and pulled out a great cricket about two inches long, with a shining bald yellow head. The place was swarming with them, and when they got entangled in one's clothes they pinched with great vigour. Just at this time, moreover, for some reasons best known to themselves, locusts descended on the island. They must have been flying across the lake before it grew dark, for they now fell pelting like huge rattling hail-stones, into the tent, on to the ground, into one's face, into the soup, while they bounded up from the ground like jack-in-the-boxes whenever one moved. We were not comfortable, and the discomfort of this detestable little island increased the later it grew; clouds gathered over the dark starry sky, and after lightning had played fantastically over the mountains in the distance for some time, and reflected itself in every colour under the sun on the surface of the lake, rain fell in torrents. We tried to sleep, but the locusts and the crickets and the fleas and native dogs were as anxious to get out of the rain as we were and crowded into the tent, and it seemed after a time that every creeping thing that creepeth upon its belly had gathered round us.

At the first gleam of light I therefore left the tent and went out to see what the island was like. It was merely a steep hog's-back of rock, with a little vegetation on the top, trees like oaks growing in the scanty soil; the heat and

the filth were beyond all words, and there was no remission of either, even down by the lake shore, nor yet in the holes which the natives dug to collect fresh water a few yards from the beach. I had intended to stay some days on the island, but there appeared to be no fishes of any interest in the salt water of the lake,



A bit of the East Coast of Lake Nyassa, near Nkata Bay.

while the few water-snails which inhabited it were similar to those in Lake Nyassa. The place itself was unendurable and we therefore left the same day, returning to Zomba, where I vowed I would never go near Shirwa again, and I never have. Still it is not worse than many other places in the great dark continent which surrounds it, but its horrors were new to me then and had not, as

they have now, become staled by custom into commonest commonplace.

The road from Zomba to the Upper Shiré circles round the great mountains and then descends through a steep pass into the plains bordering the river. On the present journey we reached Zomba on the 26th of June, and after some delay, with great exertions, with prayers and threats and promises, by dint of help from the Administration, from the African Lakes Corporation, and two labour contractors from Blantyre, we did eventually get all the loads away and down to the Upper Shiré at Lwandi, and on July 8th I left Zomba myself and my kind host, Mr. Sharp, just as the grey dawn was breaking through the heavy white mists, in which the dark gigantic forms of the Zomba and Mlangi Mountains were wrapped up. I reached Lwandi in the evening, and crossed over to the fort which lies on the other side of the river. The place is built in a great expanse of marshy land flanking the stream, and has an evil reputation as far as fever is concerned. The Shiré is here a broad sluggish stream of very dirty water and full of crocodiles, which not only devour the fish in the river but also the natives themselves, especially the women, when they come down to the river for water. It is on account of this that they are in the habit of making circular fences of bamboos, lashed together with bark, through which the water can enter, but not the crocodiles; but they generally let these defences fall into disrepair, whereby they are converted into peculiarly effective man, or rather woman traps, for the wily crocodile, getting in through the broken-down fence, lies in wait inside, pretty sure that his prey will come.

It is a curious fact that the crocodiles of the Upper Shiré, and indeed elsewhere, sometimes use their tails

A rough sea on Lake Nyassa, looking South from Karonga.

[*From a Sketch by the Author.*

when attacking a native or a drinking antelope; they swim nearer and nearer their intended victim with their long heads just above the water, and looking for all the world like an old log of rotten wood. When they have approached near enough they suddenly turn, and with a sweep of their tail flick their prey many yards into the water. So great is the force of this blow that the animal is generally smashed or stunned before the reptiles attempt to drag it down into the river, where they often keep their prey for days hidden away among the reeds. It is extraordinary to what circumstances people can become used. Among the natives no one thinks more of a man, or especially a woman, being taken by a crocodile, than we should to hear that a friend had died of pneumonia; besides, the natives' estimate of people is somewhat peculiar. One of the head boys on the Nyassa gunboats had a wife taken by a crocodile, and my friend Commander Cullen, who was then new to the country, was much concerned about it, till the man informed him it was one of his oldest wives and really did not matter much.

From Lwandi northwards to Nyassa, the Shiré river winds through a great flat, similar in all respects to those of the Zambesi which we have already seen. There is, however, more forest bordering the river and a greater profusion of tropical growths. These beautiful park-like plains are one of the richest game countries in the whole of the British Central African Protectorate. On my former visit, at a place called Mvira, I saw in one morning's walk several groups of zebra, some water buck, and eight koodoo. It was, however, at that time the hot season, and the whole appearance of the country was strangely different from what it was as we hurried through it on the present journey. On this trip, as we passed up the river

on the gunboat by night, the wind was as cold as it is on an English October evening. There was the same blue frosty look in the air, and the bold outlines of the river banks were wonderfully beautiful and unreal, for the atmosphere seemed to magnify everything, the trees looking gigantic, half wrapped up in smoke-like mist. The water of the river was intensely smooth and black, only every now and then ruffled by crocodiles as they lumbered off the bank; a succession of gleaming rings marking the places where the reptiles sank. With the exception of these crocodiles and one or two huge silent-winged owls, there was now no sign of life of any sort in the misty moonlight wilderness. A few miles beyond Lwandi the river widens into the shallow expansion known as Lake Pamalombi, which was at one time undoubtedly a portion of Lake Nyassa, but which is now merely an expanded sheet of water in the middle of a great swamp. It abounds, or at any rate it used to abound, with hippopotami, and on my former journey we had a magnificent day's sport among them here. I fancy it was the biggest hippo shoot that was ever obtained on the Shiré or anywhere else. The gunboat *Dove* only drew about four feet of water, and it was easy to head a number of hippopotami off into some shallow creek, from which they could not pass except at close range, when they received a volley from the four rifles on board. We killed eight or ten in the afternoon, and so loaded the little craft with meat and skulls that she refused to steer. As the carcases of the great beasts floated ashore the natives came down like jackals gathered round a dead ox, and ate till they could eat no more, and then rolled on the ground, like the proverbial child after a debauch of sour fruit.

Beyond Lake Pamalombi, which is exactly the shape of

a sheep's stomach, the river narrows again and extends as a broad stream from thence to its source in Lake Nyassa. This part of the river abounds with fishes, and also with fishermen; there are a variety of carp and characinids, the latter very like salmon, and capital sport with a spinner or spoon bait. The natives themselves use nothing but

Outside the New Fort at Karonga, at the North of Lake Nyassa.

immensely long seine-like nets, which they drag across the stream, catching sack-loads of fish, chiefly of the above-named kinds. As we approach the lake the river becomes increasingly marshy, and after passing the new Fort Johnstone the river banks become nothing more nor less than a profound marsh, covered with brilliant grass, reeds, and a few borassus palms. It was among these

swamps that the old Fort Johnstone was built and maintained, till almost everyone had died in it, after which it was moved further down the river to the new site. The site of the old fort was an extraordinary place, so flat that the surface of the land was but an inch or two above the river and the lake, and one had only to scoop a few handfuls of sand away to collect water anywhere. The strong marshy smell of the place was almost overpowering, and Commander Rhodes told me it had actually more than once made him sick as he rowed along the river to and from the lake, and I can quite believe it would.

Nyassa itself cannot be seen from either site, but it lies beyond a long line of borassus palms which fringe the slightly higher sand dunes of the actual coast. From this point the great lake is not prepossessing, and I remember on my former visit, after a weary walk which I made from the fort to look at it, thinking that after all it was going to be merely a repetition of Lake Shirwa. From this part of the coast, near the exit of the Shiré river, one sees as a matter of fact but a small portion of one arm of the lake, bounded by swamps to the north and west, and by hills to the east, which sweep away into the distance towards the north. Immediately in front is a little rocky island, and it is only after passing this and putting out on the lake itself that one enters the lake region proper and a new world; the swamps and the dank, foul river-courses are no more, the water is clear and blue, and so deep that, a few hundred yards from the coast, in some places one can let down a steel wire for over two hundred fathoms and find no bottom. A wild range of hills lies away to the west, which is, in fact, part of the Kirk range, and splits the southern end of Nyassa into two great arms. The hills are covered with forests which

rise abruptly from the clear blue water, in fantastic shapes of weathered and broken granite, with here and there white quartz veins, appearing among the forest trees. Along this Median southern promontory there is one of the few good harbours on the lake; it is known as Monkey Bay, and is a most picturesque little cove among the great hills, which is

Inside the New Fort at Karonga, at the North End of Lake Nyassa.

completely shut in by an island placed exactly at its mouth like a stopper. In the small gunboats one used to enter the harbour by a rock-set channel between the hills and the island, so narrow that the rocks that floored it could be distinctly seen on each side of the steamer as she passed. Inside, the harbour is enclosed in an amphitheatre of steep granite hills, which rise from the water

in immense rock faces covered with trees to the top, and at the south there is a flat broad beach of yellow sand. Here the naval officers have established a wooding station; that is, a recognised place for the people to bring wood down to the steamer to be sold. It is paid for in cloth, one yard of calico buying one cubic yard of wood. The bay is often very still, and where the steamer swings at her moorings the bottom can be distinctly seen through the deep clear water, as well as hundreds of fishes, often very brilliantly coloured, one of them of a deep sky blue. Fishing here is, however, not often a success, as the rock fish are generally small-mouthed vegetable feeders, better caught by the use of a trammel or some such extensive net. Immediately inland from Monkey Bay one enters a series of beautiful park-lands, lying between steep, forest-clad hills, which abound with guinea-fowl, buck, and wild pigeons. From Monkey Bay onwards, to the wild headland of Livingstonia which terminates the promontory, between the eastern and western arms of the lake, the scenery increases in beauty as we proceed; in one place, where the hills are very high and very steep, there is a great rent in one, and immediately below, standing partly in the water, is an immense mass of rock, which would exactly fit it if it were taken up and replaced, and which has evidently fallen from it, probably during an earthquake. On clearing the headland, the western arm of the lake opens up as a broad sheet of water many miles across, and beyond which appear in the dim distance the lofty heights of Northern Angoniland. It is here that one first begins to realize the huge size of Nyassa, and to become possibly unpleasantly acquainted with the long ocean-like swell that is nearly always running on the

open expanses of the lake. Immediately to the north there is a lofty headland, beneath which lies Rifu, while far away to the east can be seen the green ground rising behind Fort Maguire. The sea on Nyassa can be a very formidable affair. During the dry season the winds

The track from Nyassa to Tanganyika, with the wire of the Transcontinental Telegraph in the foreground.

generally blow from the south-east, and often freshen into veritable gales, the sea rising into endless white horses and the surf breaking on the rocks in a manner that would not disgrace the Channel at its worst. In the old days before the gunboat *Gwendoline* was built, and there was nothing on the lake but the African Lakes

Corporation's steamers, the German gunboat and the two little English light-draught boats, it was necessary to dodge these storms with as much care as an open boat requires on the west coast of Ireland. It was then quite an undertaking getting from Monkey Bay anywhere north, as a wide arm of the lake had to be crossed, and the boat would be exposed for several hours in the open lake. Four years ago, on my former expedition, Sir Harry Johnstone allowed me to attach myself to the small gunboat that was then cruising on the lake, as by that means I should have abundant opportunities of visiting different portions of it, of examining the geology of the coasts and bays, and generally getting information of the whole region and its fauna. The *Pioneer* was commanded by my friend Captain Rhodes, and I spent about seven delightful weeks with him on his trim little craft. We started from the south and went to the north end of the lake, plying about, and running into every nook into which we could get. She was an extraordinary boat, so crank that when the boy brought the soup along the alley-way to the saloon, she used to roll perceptibly. The crew were natives, the engineers were Indian, and there was an excellent petty officer called Bighton, who used to make wonderful twists of native tobacco, which he rolled up in canvas and then bound with yarn. It was the very strongest tobacco I think anyone had ever smoked, but it was the best we had. One of the Indian engineers, who had engaged himself to the British administration as such, confessed ultimately to being nothing but a cabinet maker, and when he was on duty the screw used to change its velocity in a most alarming manner, so that I constantly edged to the extreme stern of the boat. Rhodes also had a great piece of bacon hanging up in the saloon, pieces of

View over the forests on the Nyassa-Tanganyika Plateau. The plain now covered with forest is the floor of a departed lake, altitude 4,200 feet.

[*From a Sketch by the Author.*

which we used to fry when the natives brought eggs ; we had also plenty of oatmeal, a most desirable thing in Central Africa, and four or five she-goats, which were kept on board for milk. These goats had rather a rough time of it on the whole, as the boys used to trample their green fodder overboard as they moved past them, where they were tied up by the neck just alongside the boilers. One night in particular, while we were anchored in a little bay which lay open to the west, I woke up with a terrific noise, and when I looked out of my bunk I was thrown violently on the floor. I then noticed that the ship was rolling, rolling so violently that the swinging lamp struck the ceiling every time. When I got up there was darkness and confusion above, a big sea was coming in from the lake, Rhodes was forward shouting orders, and the men were trying to lower a boat with a small anchor in it called a kedge, while on the other side of the steamer a weird hubbub was going on, it was caused by the goats, who had gone overboard, all tied up by the necks, and hanging together like a bunch of grapes, and they were now bleating loudly in the air, now merely bubbling in the water, as the great swells swept under us. However, we got them up again, and they gave us milk next morning as if nothing had happened.

After leaving Livingstonia and the southern arms of the lake, the peculiar character of the Nyassa basin becomes more pronounced. The lake stretches northward like a great arm of the sea, bounded to the east and west by lofty mountains which flank its shores. These ranges really extend along the whole lake from north to south, and in the north the same trough-like valley is prolonged overland, with similar flanking ranges, to Lake Rukwa close to Tanganyika. The mountains

which thus run parallel with the lake shores are in reality not, however, mountains as mountains are properly understood, but the broken edges of high tablelands, that flank the lake at about the same height on either shore. Nyassa thus really lies in a great square-sided trough, which is, as it were, let into the face of the land. The trough, moreover, is exceedingly deep, soundings of three hundred fathoms, no bottom, having been obtained by the naval officers, at several points in its bed, while over a great part of its area two hundred fathoms and upward had been recorded. When examined more closely, the figures of these soundings showed, however, that the really deep, or then bottomless portion, occupied only a small area near Nkata, and it was one of my primary objects on this journey to find out to what depth this area actually did run. I had brought a thousand fathoms of steel wire, and with this I went with Captain Cullen to the place in question, where we sounded, finding bottom here for the first time at 418 and 430 fathoms, in two places close together. Thus it is obvious that if the whole of Nyassa were to run out, the gunboats would still, as one of the officers observed, float on over a thousand feet of water ; or in other words, the bottom of Lake Nyassa is something over a thousand feet below the level of the sea. In attempting from these facts to form some estimate of the character of the Nyassa Valley, we must remember, however, that in many places the enclosing ranges rise to a height of seven thousand or eight thousand feet, before we can gain any idea of the nature of the vastness of the gulf or chasm in which the lake lies. It is, in fact, a huge abyss over three hundred miles in length and averaging some thirty in breadth and about nine thousand feet deep. Huge though it is,

this depression is not the only one in Africa of a similar nature, but, as we shall see later, it belongs to a series of such chasms, which extend all the way from the site of Nyassa in the south to the Red Sea in the north.

As we voyage north along this strange lake, the scenery

A Chief of the Nyassa-Tanganyika Plateau.

increases in magnitude and beauty all the way. The principal harbour on the west coast is Kota Kota, which is one of the old slave ferries across the lake. There are still several old Arabs living in the place who were active in the slaving days, and are, probably, now, in an underhand way. At Kota Kota the actual coast-line is low, the hills standing away from the lake several miles

inland. It is consequently here fringed with marshy shores, and the shallow harbour which exists is formed simply by an outstanding sand-spit. In these regions, in fact all over Central Africa, during the rainy season, the air is marvellously clear, and the sky as dark and blue as that on a high mountain-top. At such seasons the opposite coast of the lake is clearly visible, every spur and ridge on the great hills standing clearly out above the deep purple body of the lake, although the shore is really quite hull down. At these times distance in Africa vanishes altogether; I have seen the hills north of Cameron Bay on Tanganyika from those beyond the extreme south of the lake, more than eighty miles away, so clear and detailed that you could actually see the shadows among the faces and ravines. So also in Nyassaland one can make out every detail on mountains over forty miles away. It was this clearness of the air which led to a very curious mistake during my first visit to Kota Kota. We were sitting in the fort looking out over the lake and over the low sand-spit which bounds the harbour, the point of which is about five miles off, when I saw what was to all appearance a delicate cloud of brilliant white smoke blowing rapidly over the water near the point; it was so dense and so white that it could not be that of an ordinary fire, besides which it was some distance above the surface of the water, and although there was not a breath of wind in the hot afternoon, the cloud was moving with immense velocity directly towards us. For a few minutes we could make nothing of it, but, as it neared, the spell was suddenly snapped and the cloud resolved itself into thousands of flying components, each in fact being a small white bird very like a tern. Besides white clouds Nyassa also has its black clouds, equally

The City (!) of Kituta and the extreme South End of Lake Tanganyika.

[*From a Sketch by the Author.*

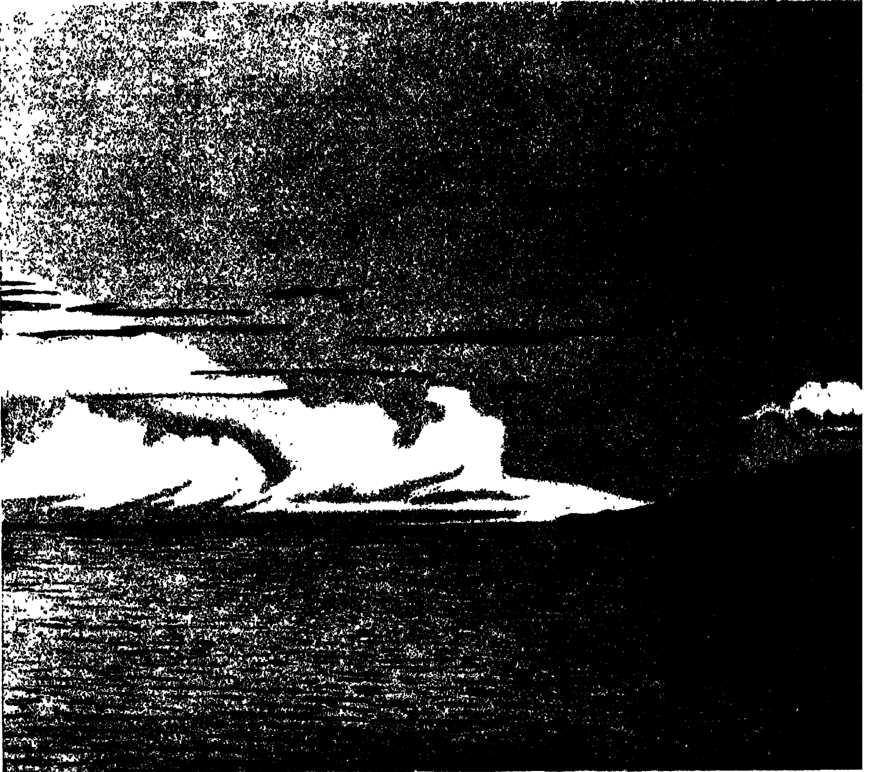
curious in composition; sometimes the lake appears, in fact, to smoke in all directions, for clouds and columns of a dusky vapour are seen rising out of it, often over a thousand feet in height. The more one looks at these clouds the more curious they appear, for they stretch up from the lake in double lines, which become bent and twisted and knotted in the breeze. If they blow towards you the first thing that gives a clue to their nature is the appearance of crowds of swallows and swifts circling at all heights above the columns, and if they blow over you, or you run through them in a boat, the smoke suddenly resolves itself into countless millions of small flies, each like a gnat with three tails. These Kungu flies, as the natives call them, breed in the water, and when mature rise out of it in countless tens of thousands of millions, and for some reason or other rise in the form of a hollow cylinder several yards wide, which when looked through appears like two pillars of smoke. When they blow on shore, as they often do, the swarms of gnats which bury the bananas and the grass are eagerly collected by the natives in baskets, and made into a sort of fly paste, with salt; it is not so bad, but wants more taste.

Northward from Kota Kota the scenery changes, the mountains approaching nearer to the coast, until they rise abruptly out of it, huge rounded heights, clearing the forest and appearing above it as green grassy summits, seven thousand to eight thousand feet in height. On the top of these high plateaux the climate is changeable and cold, long spells of cloudless, windy dry weather which converts them into a withered desert, alternating with prolonged rains, during which they become as green as an English meadow and as wet and cold as the English Midlands in November.

CHAPTER IV.

"Bog, clay and rubble, sand and stark black dearth."
—BROWNING.

FROM the warm, bright, unhealthy flats at the north end of Lake Nyassa, there appear in the north-west a series of broken ridges covered with thin forest, and rising into the general mass of the northern ranges to a height of between four and five thousand feet. It is over these ridges that one of the great octopus-like arms which civilization is throwing out stretches into the interior beyond. The arm consists of the inevitable African twin series of forts and mission stations, which here stretch along the course of the new trans-continental telegraph wire, the double-jointed cast iron poles of which form excellent rubbing posts for the great beasts of the forest. They come, in fact, specially to scratch themselves against them, and it may be supposed that these beasts, at any rate, will say "God bless Mr. Rhodes and the telegraph company," whatever other rewards may be earned at the hands of fate by that remarkable scheme. The posts, or those which can stand the repeated assaults of one sort and another which are continually being made against them, run through the districts where the so-called Stevenson road was said to go, and which is generally represented like a long flash of lightning stretching from Nyassa to Tanganyika, on the existing maps. As a matter of fact



View of the West Coast of Lake Tanganyika.

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this road was never in existence, at all events beyond forty miles north of Karonga, and it has now been superseded altogether by the track which has been cut, partly by the officers of the British Central African Protectorate and partly by those of Northern Rhodesia. This track is not exactly a road even now; that is, it is not metalled, nor always ditched, but the trees have been cleared in bee lines from point to point, and it forms at any rate a guide to the traveller who is crossing from one lake to the other. I say this because roads which are cut in Central Africa form a wonderful ground for new and very thick growths to spring up along their course; so that in a few months the road that was assumes the appearance of an immense and very bristly caterpillar, beside which it is possible to steer an erratic course, but to walk on the road itself—never.

After leaving Karonga and traversing the hot, marshy plains which front the hills, the track ascends rapidly through wild mountain scenery to the tableland beyond, and once over this we have entered the upper African world; we have, in fact, climbed as it were on to the great gabled roof of the continent, down the ridge of which lie the lakes of Nyassa, Tanganyika, Kivu, the Albert and the Albert Edward Nyanzas, just as if they were a string of gigantic rain puddles in a gutter. We are free of the low river flats, free of the beautiful, pestilential, and utterly damned lake shores, with their baobabs and palm trees, their long white pebbly beaches and their millions of gorgeous fish; we are out on the high, rolling, forest-clad ridges of the far interior, of which so much has been predicted, where the people were only to be taught and the forest cleared, for the whole place to run over with corn and wine, waiting for Europeans to come and

consume it. We are, in fact, in that paradise of the imagination par excellence, Northern Rhodesia, from which the coal and the copper, and the gold and the diamonds, are going to be brought down by the Trans-Continental Railway's engine drivers, to the great delight and enrichment of everybody concerned. But what as a matter of fact do we find? We have tramped up in perspiring desperation from the shores of Nyassa, over an immense series of ridges, among the ravines of which there was the most beautiful mountain scenery, with here and there superb views of the blue lake, stretching below in shimmering heat and haze, as far as the eye could see. We have got out at last, over a final sandstone ridge, on to a great plain between four and five thousand feet up in the air, and flanked to the east and north by ranges of blue grassy mountains rising again three or four thousand feet above the plain. The plain itself is covered with forest, intersected with patches of rank grass, and stretches away apparently to infinity towards the north and west. The air is cool and the strong night wind desperately cold to the pampered blood we have brought up from the hot lake shores below. We are on the Congo watershed, for the Chambesi river rises quite close to us and flows into Lake Bangweolo away to the west. Near Minniwanda's village, which stands not far from the road, there is an old British Central African station, now in ruins; there is besides an old mission also in ruins, for the missionaries all died there of fevers; while around us everywhere, over the boundless forest-clad plains and over the lonely hills, there is the gorgeous tropical light. There is the rustle of the perennial summer wind among the scraggy trees, there is the murmur of innumerable bees, and apparently there is nothing more. No one ever described these

Sunset and storm clouds over Lake Tanganyika from the Harbour of Maswa, South of Ujiji.

[*From a Sketch by the Author.*

strange upland forests better than Drummond, who spent some weeks among them near this very place, when he said that they seemed to stretch for ever, "shadeless, voiceless, trackless," as far as you like to go. They are indeed of vast extent, but in reality they are terminated towards the south-west by the vast swamps surrounding Lake Bangweolo ; they reappear, however, to the south of this lake, and stretch as far as the Zambesi river itself. They sweep away north and cover the whole region between Tanganyika and Lake Mwero, and they stretch along the western slopes of the hills fringing Tanganyika on the west. For all practical purposes, therefore, it may be said that the whole of Northern Rhodesia consists of this rolling country, covered with these bare sterile forests, or swamps, or the open water of several great lakes. Over all this region, the great rains and the long droughts have full play ; in the one there is no water which is to be depended upon or fit to drink, and in the other there is no room to pitch a tent out of it. At whatever time of the year one visits the place there is, however, something wonderful and awe-inspiring in the boundless forest, which stretches away in every direction as far as the eye can see, its ocean-like surface only broken by occasional ranges of lonely, lofty hills, that rise above the soft, feathery forests of the waving plains like blue capes and islands out of a dark green sea. In the dry season, formidable rivers like the Siesi, and the swamps of the rains, shrink and disappear until their rocky courses contain nothing but chains of pools, and the dry marsh-lands are converted into scorching plains of cracked and hardened mud. The scanty grass is burnt underneath the thin, leafless trees, and a mighty rushing wind whistles through the dry crackling vegetation day and night. Clouds of red dust,

carried by the wind, coat the tree stems on the south-east side as if they had been painted with red chalk. The air is dim, and the blue of the sky paled with the smoke of the endless grass fires which at this season are burning all over the continent south of the Equator, and which by night are seen creeping over the hills like fiery snakes, or lighting up the sky with a broad glare as of some great town. There is dust in one's eyes, dust in the air, dust in the soup, dust in one's clothes, and there is the particular abomination of Africa, the white ant, who, without haste but without rest, manœuvres everywhere. He appears suddenly in reconnoitring parties in one corner of a hut, and you move your precious boots in terror to the other. During the night, however, the ants bring up the reserves and talk it over, and finally they build a tunnel of neat little bricks right across the floor, straight to the boots, all complete before daylight and almost invisible, and while you are out next day, the ants fall upon the boots, devouring them from the inside outwards in all directions till light shows through the thin skin of leather left, and next time you lift up the boots, which are perhaps your last pair, they fall to pieces as if they were made of paper-ash.

In the wet season things are not much better; they are perhaps on the whole much worse. Fever is more prevalent, so is dysentery; the river and swamps become full, the bushes and trees put on a respectable dank green tropical appearance, and in the fiery heat of the sun, which follows the thunderous gloom of the storms, brilliant flowers open. The air is warm and limp throughout the day, like that of a rainy June. And evening finally steals over these lonely upland wildernesses, in some sublime combination of tropical colour and dissolving storm-clouds, such

View over the town of Ujiji and across Lake Tanganyika from the German Fort at Ujiji.

[*From a Sketch by the Author.*

as neither Ruskin nor Turner ever saw or even imagined. As the last rays of the sun sweep horizontally over the boundless woods, shadows of every shape and shade gather in the hollow river courses, and reveal, as they deepen, the real vastness of the scene around. At such times a sense of utter loneliness and desertion steals over the traveller. Terrors and horrors of every description start up in the imagination, and send him back to his camp fire and his instruments, anywhere out of the presence of the immensities and the eternities which reign without.

At night, and at all seasons of the year, the natives dance wild dances in the villages, under the great fig trees which grow near the water on these plains, but without the least notion of the historical use to which fig leaves have been put. They play on drums and stringed instruments till three o'clock in the morning, and when at last their hubbub and that of the gusty midnight wind have died down together, the world without sinks into a stillness so profound and so unearthly that you start out of bed wondering what has happened, just as people often do when the screw stops on a great steamer out at sea.

As we approach Tanganyika itself the plateau attains an altitude of about six thousand feet, and near the Siesi river there are wide expanses of grass land, covered in all directions by innumerable ant-hills, often thirty to forty feet in height, and one hundred feet in diameter at the base. They present the most extraordinary appearance, the country looking as if it was studded by countless miniature volcanic cones, and how all the ants in these innumerable hills live is very difficult to understand, for there is very little vegetation in the neighbourhood, and it is not easy to see what the countless millions of termites

can find on which to feed. Personally, I hope they starve.

North of the Siesi one enters a hilly, broken country ; in fact, we are here among the same hills which bound the southern shores of Lake Tanganyika, and among which I found in 1895 conglomerates, very similar to those in the Transvaal in which gold occurs, but which here have no such auriferous characters.

If the districts between Nyassa and Tanganyika can be taken as a measure of the rest of Northern Rhodesia—and I am pretty sure that on account of their altitude they will match favourably with the greater part of it—it will be obvious to anyone acquainted with the sort of country I have just described, that is, with the bush veldt of the fever country of the Transvaal and Portuguese East Africa, that it is a more or less beautiful but an extremely undesirable place. It has, however, a high æsthetic value, and it will serve in the future in all probability for a few sportsmen and a new school of painters, neither of which care much about discomforts or the probability of an early decease.

In an extended survey of the African interior this country is, however, of some importance, because it affords a valuable object for comparison with the far better types of country which exist in both the German and Belgian spheres of influence, beyond Ujiji on Tanganyika to the north.

CHAPTER V.

"I do pray you, master, have the place swept up, for when I did see the abominations in it, I did cast my gorge."

—*Old English Letter.*

Up to this point of our journey north it will be seen that we passed through district after district, from the Zambesi mouth to the heights above Tanganyika, without anything in the way of adventure, without any real difficulty of any sort. There were the inevitable African delays, exasperating enough while they lasted, but our introductions to the different European officials passed the expedition on from place to place as if it had been a postal party with the royal mail. Thus far, as a matter of fact, you can go in this direction, either at enormous expense in the hands of the African Lakes Corporation, or, as we did, in the character of a definite scientific expedition befriended by the English Government; but beyond this point things are different. It is now, and indeed has been for some years, only after leaving the south end of Tanganyika, *en route* for the north, that the journey begins to take on the character of those of the older explorers. I had arranged with the Blantyre manager of the African Lakes Corporation to charter their small steamer on Tanganyika, which I had seen on my former trip, and which would answer our purpose very well if she would steam at all. She was,

in fact, the original *Habari Ingema* (good news), launched eighteen years before by the London Missionary Society, and afterwards sold to the African Lakes Corporation, and I had obtained her for the exclusive use of the expedition for the payment of two hundred pounds a month. It was now doubtful whether H.M. Commissioner, Mr. Sharp, would be able to come with us at all to Kivu, as we had hoped, owing to the disturbance in the Awemba country to the west. We had heard many stories also of the disturbed state of the country north of Tanganyika, and I therefore wished to get down to the steamer and put as many loads on her as possible, and go right up to the north end of the lake, where I could ascertain what the state of affairs really was, and leave the loads either at Ujiji or at the north end itself, if there was a suitable place there, and then return to the south, leisurely exploring the lake as we came. To this plan, however, there now came into view several obstacles, for although we had got the loads to Abercorn, fourteen miles south of Tanganyika, beyond this point we could not move; in fact, we sat here some twenty-one days before it was possible, either by love or money, to raise sufficient porters to move the loads down to the lake. At last, however, enough loads were got down in advance, and I left Abercorn with a light heart to see the steamer and arrange with the African Lakes Corporation's agent, who was at Kituta, about taking her over. It seemed indeed as if I was at last within measurable distance of getting what I had wanted for four mortal years, namely, a steamer to myself on the lake, and thereby the means of finding what fish and other things were in its deep waters and away in those portions to the north, where I had never been.

On leaving Abercorn in the heart of the plateau forest, one strikes away to the north, at first through the same sort of country, and it is almost impossible to believe that within a few miles the great Tanganyika itself lies in its vast gulf, nearly three thousand feet below. The descent when it does begin is, however, exceedingly steep, and just at its commencement there appears away to the west the long blue line of gigantic cliffs that fringe the south-western shores of the lake. On this march I was quite alone, my Somali carrying my rifle, some hundred yards behind, and as I descended the peculiar features of the great valley began to appear one after the other, just as they did when I first visited Tanganyika in the spring of 1896. There is something keenly interesting in visiting scenes which have left an indelible impression on one years before; little things have changed in the surroundings, which we regret. Here the old native path which used to exist, worn down below the surface of the ground by the silent tread of generation after generation of Ulungus, had been converted into a broad track by the felling of trees. The natives had made new pumpkin gardens by the side of the road, clearing the trees where there used to be a forest, "ancient as the hills," but the "spots of sunny greenery" which the remaining forest still enclosed were as brilliant with flowers and murmurous with bees as ever. Even the ring-doves and the green pigeons had not departed, nor the occasional bush buck that stumbled up from among the trees; nor the sand, nor the flies, nor the brilliant blue jays. It is indeed a fact most noticeable in Africa that every great lake has an individuality of its own, an individual climate, and an individual type of scenery. With each there are associated peculiarities of atmosphere

and temperature, peculiarities in the formation of the surrounding land, peculiarities in the coast flora, and peculiarities in the water of the lakes themselves. In fact, if an example of that detestable animal, the observant man who had seen all the lakes, was to suddenly find himself transported and set down in a part of one of them where he had never been before, he would nevertheless know instantly on which lake he was.

As we near Tanganyika, the path winds down through a gradually deepening gorge which looks towards the north. The sides of this gorge are very characteristic of the place. That on the west rises in an almost perpendicular cliff of dark red sandstones and conglomerates to a great height, the ledges and clefts in which are studded with trees, while the crest itself thrusts a fringe of the plateau forest against the brilliant sky. On the east the wall of the gorge rises more gradually in a succession of forest-clad ridges, which roll up to a great height, and in reality constitute the rather narrow barrier which separates the Tanganyika and the Rukwa valleys. Somewhere over these hills to the right there is a village, and about that village there hangs a gruesome story. It appears that after Livingstone died at Ilala on Lake Bangweolo, his boys carried the great explorer back round the south end of the coast. The body had been disembowelled and preserved in quantities of salt, and on the long march had become so dried that it was carried like a rifle on the shoulders of his men. When they arrived at the village in question these men were short of cloth and beads; but the salt was a marketable commodity, and this was bartered with the old chief for the food, etc., they required on the march towards the coast.

Tanganyika itself, the most mysterious lake in the

bura.

[*From a Sketch by the Author.*

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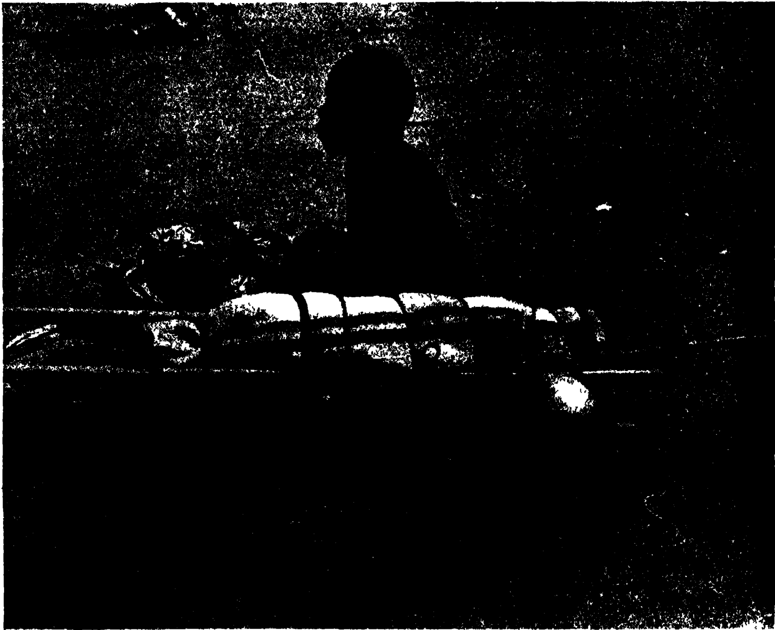
world, appears at last as a strip of bright blue water, which is blue with the peculiar powdery blue of the Mediterranean, and lies between a continuation of the red sandstone bluffs on the left and the distant eastern coast of the lake. The water first comes in sight through the black leafless forest trees



A Swahili porter and his load.

through which the path descends, and between the lower slopes of this forest and the water itself there are flat plains of dark brown and green marsh-land, covered with patchy bushes of mimosa trees and grass. The dark red cliffs on the west and the pale purple feathery surface of the forest on the hills rising to the east, together with the nearer setting of the green

marshes, form wonderful contrasts with the blue water, which extends to a sea horizon towards the north, and is flecked and streaked by dark catspaws of the trade wind as it flies away in that direction over the lake.

In the old days when the African Lakes Corporation first established a little trading station near Kituta at the head of the marsh just beneath the forest, there used to be a European house of mud and wattle, and some other buildings of the same description standing round a square space of ground, in which the agent had planted radishes and pine-apples. On the present occasion all this had disappeared, however, having been utterly consumed, along with nearly the whole of the native village, in about ten minutes by a terrible fire. The wreck of the place was standing as I passed out of the forest on this particular day in the unspeakable still heat of the afternoon, and almost at the same instant came the peculiar smell of Tanganyika itself, a smell which is like nothing else in the world, but somewhat resembles that of a weedy tidal beach, on which the sun has dwelt for many hours. The agent had betaken himself after the fire to another small mud house which had been built as an outpost of the Chartered Company, by a half-breed called Tom Faulkner. The place was filthy and dirty beyond all words, and in an inner room, almost dark, which reeked of filth of every description from bad whiskey to rats, lay the engineer of the steamer, whom, according to our contract with the Corporation, I had chartered as well. He was at the time badly wounded, having, I suppose in want of something better to do, taken to hunting cockroaches on board his ship with a revolver, a practice which is not to be recommended, as game of this description is apt

to run over one's person, when shooting becomes very risky, and it had ended in this instance by the bullet passing tangentially through the flesh of the engineer's chest and into his arm. The agent himself was also a remarkable young man, with something the matter with his eyes, and who to every question I put to him about the steamer answered, "Oh Christ, yes," or "Oh Christ, no," or "Oh Christ, surely," till I finally went outside by myself to laugh and think about what had better be done. It was, however, growing dark, and before I had time to arrive at any conclusion I returned to the agent's bungalow to partake of a meal, the putridity of which surpassed that of any I have ever seen. After being made sick, and consequently satisfied, by the repast which we had contemplated in the dim unspeakable squalor of the hut, I went to bed but not to sleep; Kituta is hot, as hot as most places in the world, and just before the rains the nights are fearful. To anyone who has not experienced it, I doubt if the condition of things attained there, in a tent pitched on the hot sandy ground crowded with mosquitoes and without a punka, can be realized. Directly you are undressed you are drenched from head to foot with the effort, and tingling all over with mosquito bites. No sooner are you safely inside the net than the appalling heat threatens asphyxiation, and you roll about in a black despair, till it becomes intolerable. On these occasions I used to get up and go out into the heavy night, wandering about like a ghost in pyjamas looking for a wind. On such *nuits blanches* wanderings, one often sees strange sights in Africa. I once came across a group of great baboons drinking in a pool; on another occasion I was watched by two fluorescent eyes which

probably belonged to some large cat, and which followed my movements from some trees until I had stealthily crept back under the shelter of the tent. Once in the terrible country north of Kivu, I sat down on what I thought in the clear starlight was a log of wood, to find—oh, horrors!—that I was sitting on the soft mass of a putrefying man.

Next morning, shortly after sunrise, I went with the agent across a long stretch of sand to the beach to inspect the steamer, which was anchored just beneath the red cliffs on the west of the bay. Outside she was rather a prepossessing craft, painted white, built like a yacht, with a yawl's rig and a funnel very far aft. She was indeed a sailing boat with auxiliary steam, and in her most palmy days never intended to do more than five miles an hour with steam alone. We paddled out to her in an old dug-out canoe, and on a closer inspection she was not so nice; there was a dead goat blown out to an enormous size on her poop, the decks were brown and stained; sails there were none, while the stays and rattlins fluttered loose in the warm breeze, mostly broken in half. Inside she was far worse: a sickening smell came up from below, a smell that proclaims but one thing, the universal prevalence of cockroaches. The port glasses were broken and cracked, and the stained cushions in the saloon were on no account to be touched lest undesirable things might leap out of them. The lids of the lockers were gone, and the floor was carpeted with an indescribable collection of filth. From the panelling on the walls, from the holes in the rotten floor, from the cracks in the shrunk casings, there came an ominous rustling and scuttling, and from under every object in the place huge cockroaches peered stealthily at us, waving their long feelers gently up and down. In the

engine-room the condition of things had reached a climax ; the boiler pump valve leaked and had been temporarily fixed up with strips of cloth and cow-dung. There was a leak at the junction of the escape pipe, and there appeared to have been much steam blowing off at the nuts round the

A native.

manhole. But the most curious thing that the cockroach-hunting engineer had left behind him was an extemporised cylinder cover. This consisted of a broken one, three or four pieces of iron plate, some packing, some old nuts, and a monkey screw-key turned upside down and holding in its jaws the cylinder and its cover together. Whether it

was the inspection of the dilapidated inside of the steamer or effects of mosquito bites I don't know, but the agent now became ill with fever, and I returned with him to the wretched hut he occupied with many misgivings as to the possibility of ever getting the steamer to go at all. In his lucid intervals, however, I learned that there was a boiler maker somewhere on the lake who had been sent by the African Lakes Corporation to make a section boat for the Congo Free State, and who was staying for the sake of his health at the mission at Nyamkolo, a spot, by the way, which has as high a death rate as any place in the world. The worst thing about the whole affair was, that, the African Lakes Store at Kituta having been burnt down, all the tools, solder, spare parts, red lead, etc., were gone too, with the exception, fortunately, of a new cylinder top which was too substantial to melt. In the early morning, just as the red dawn was breaking over the lines of feathery leafless forest which bound the lake on the east, I set out to find my boiler maker. In order to get to Nyamkolo, one crosses the creek to a point in the westward swamps where there is an excessively dirty village called Kipata. The voyage is generally made in a dug-out canoe, in which you have to sit flat down in the bottom with your face a foot above the water, and trust implicitly to the balancing agilities of a native who stands up in the stern of the dug-out log and flourishes his paddle like the pole of a rope dancer, and by dipping it at convenient intervals, generally manages not only to keep the canoe from rolling over, but to make it move along at the same time. In the creek there were innumerable crocodiles, which lay like inanimate logs of wood, and each of which rocked as we passed by, so that with its nearer eye it could watch the canoe and see if it was going to capsize, in which

event there might have been something for one or more of them to eat. If travelling in a dug-out canoe is not easy to a European, landing at Kipata is far less so. The canoe is pushed in among the tall reeds, in the narrow lanes between which the water is deep and floored by waving masses of green kara. The lanes end in mud over which the canoe cannot be pushed, and here the traveller gets out, sitting on the shoulders of his stalwart boatman, with his hands grasping the crown of his woolly head and his legs twisted tightly round his neck. The length of this double man is considerable, and renders walking through the deep mud of the shore very likely to end in performances similar to those of Japanese acrobats, only in these places, instead of ending with a graceful bow to the audience on the dry beach beyond, you finish as a rule landing head downwards in about four feet of pitchy, stinking mud. It happened thus on the present occasion. I was nervously clutching my boatman's head and driving my knees into his neck, half way between the boat and the shore, when he tripped over a submerged root, and I flew in a beautiful parabolic curve head first, like the white knight in "Alice's Adventures," and ended heels up in four feet of excessively odoriferous African mud. From this position I was eventually pulled out by several villagers, and finally set on a log to drain in the centre of an admiring crowd. I was perfectly blind with mud, and, as I found after working out through the slime, quite black to the waist.

It was now about seven a.m., and the sun was blazing over the endless reeds and sandy stretches which lay to landward, covered with *cassava* and wild cotton flowers. As I plodded on over the hot, soft, crunching sand, spear grass spiked my legs and hands, making little beads of blood

stand out wherever they touched the skin, and gradually the layers of mud dried and cracked out of my hair, the Somali informing me with a grin that I should soon be a white man again. The path across the sand flats ends abruptly against the sandstone cliffs which rise out of the reeds, and over this the road winds in a succession of jerks, like the road up the Pyramids. In ten minutes it became apparent that it was not only excessively steep, but that the sun was on our backs and so powerful that it made one gasp and turn sick, so that I continually sat down, making a pretence of admiring the broad blue expanse of the lake and the great brazen dome of the sky, while in reality sweat was streaming from every pore and the pulses in my neck threatened to burst. After some thirty minutes of this foretaste of hell, I came out on the top of the cliffs into a strange upper world, filled with cool breezes and covered with thin forest. Everywhere the grass-hoppers and bees rattled and buzzed about amongst the coarse grass and delicate flowers, and we went forward as it were with a leap and a bound into the breeze. From where we marched the western arm of the great lake lay vast and flat and blue for some sixty miles to the north, and over the dark stretches of deep clear water, there rose like gigantic purple shadows the western edges of the great valley, soaring in sheer precipices two thousand feet or more in height. Between us and these distant mountains ran the curving line of yellow sand on the lake shore, bounded on the one side by the leafless forest and on the other by the boundless lake, which spread itself out to the north in changing shades of ruffled blueness between the islands and the coast. Everywhere the spirit of Tanganyika seemed to brood over the strange landscape, which lay before us mysterious and solemn, with the deep blue sky

The long and the short of our escort through the German Territory, North of Tanganyika.

above as clear and keen as that in an intense frost at home, and no sound anywhere except that of the distant torrents falling among the hills, and the scream of the fish-eagles calling on the rocks along the coast. From the ridge the road slopes down to the swamps bordering the lake, and when I was here for the first time there used to be a mission station and an unfinished stone church, standing on an elevated mass of flat-topped rock between the swamps and the lake. The mission when I first visited the lake was entirely deserted; no one lived in the neat thatched bungalows or taught in the school. The roof of the church was partly fallen in and brilliant lizards ran about the vacant window frames and over the sunlit floor. Here also, as near the mission station Drummond described on Nyassa, there were among the trees and the sun-dried rocks a number of European graves huddled together in a space of stony ground; and these told, in the blatant way of this beautiful but utterly damned land, the old African story.

It is easy, however, to go away from this place of evil memories over to the wooded islands, where we find ourselves in scenery very like that depicted by Martin in the vales of Paradise. On the soft beaches of yellow sand covered with tall mimosa bushes there lie, moreover, the strangest types of shells to be found in any lake. One is long and spiney like the murex of the sea, another is like the periwinkles of our half-tide rocks, while a third is like the naticas which can be dredged up in the deep water at the mouth of the English Channel. In the clear water between the islands and the mission there are, moreover, hundreds of almost invisible medusæ which look like pulsating rings of glass, only the mouth showing in the centre of an organism which is as clear as the water

itself. Here also the lake is entirely floored with the shells of the millions and millions of molluscs which have lived and died in Tanganyika and drifted into acres of shelly deposits, and on these in turn there are now growing three distinct kinds of sponges. Two of them are like the sponges which are found on the shores of the seas, but the third has spicules of silica embedded in its substance, which are at the same time not only like those of a species that lives in the Congo, half way between Tanganyika and the Atlantic Ocean, but which are also exactly like the spicules of sponges found in the marine deposits of the Silurian epoch. In the waters of the lake there are also hundreds of fishes; brilliant-coloured *cyclids* flash about among the shore rocks, while out in the lake the water is ruffled by leaping shoals of larger fish. As there are innumerable rock-fishes here, so there are innumerable kingfishers perched in the mimosa bushes, trying to catch them, and for ever diving with a flop and a splash into the water near the shore. The kingfishers are, however, not the only enemies of the Tanganyika fish; on the bare limbs of the trees which grow above the shores there are often to be seen perched one or more white-headed ospreys, and these fish-eating eagles have habits as regular as those of any City merchant. I used to know one of them particularly well. He was a bachelor bird and lived in a crack in the rocks of an island near Kinyamkolo, where I was camped. Just below the crack there was a great dead tree, and every morning exactly a quarter of an hour before the sun rose this bird used to come out of his crack and scream; he then flew into the tree, and for exactly a quarter of an hour he would pick out lice and other vermin from his feathers. Whether he got them all out or not did not

seem to make much difference, for exactly as the sun rose he sailed off straight down the lake for seven miles, where there was another dead tree at the end of a beautiful little bay; from this tree he solidly fished till eleven o'clock,

Omari-bin-Omari and Taratibu.

when he came back to his other tree and screamed till four o'clock in the afternoon. He used then to fish with great care and deliberation from where he was till sunset, when he went to bed. He did this while I was there without a break for six solid weeks, and after I had been away for a month up the lake I found he was still passing the

self-same life. I therefore got up very early one morning and took a shot gun and some No. 3 shot with me, and sat on the rocks above his crack. Just before the sun rose he came out as usual, and would have gone through the same round again if I had not shot him dead just as he began to scream in the tree below.

CHAPTER VI.

Οἱ δ' ἱστὸν στήσαντ', ἀνά θ' ἱστία λευκὰ πέτασσαν'
'Εν δ' ἄνεμος πρῆσεν μέσον ἱστίον, ἀμφὶ δὲ κῦμα
Στείρῃ πορφνεον μεγάλ' ἴαχε νηὸς ἰούσης'.

—ILIAD.

IT was from Kinyamkolo on my former journey, and before I had become inured to the peculiar brutality of the African climate, that I tried to make a voyage to Cameron Bay in an old historic craft. She was not the steamer which we used on the present journey, but a steel section boat of the nature of a barge, with a cutter sail and with all the appearance, as sailors express it, of having been built by the mile and cut off by the yard. Sir Harry Johnstone had had her sent up to Tanganyika some years before, and told me I might use her if I could find her anywhere about. She was lying at Kituta bottom up in the swamps, full of hornets' nests, and after we had turned her over carefully and scraped her, there were many pinholes rusted through the steel sections of which she was built. We screwed small iron plates over all we could find, and I then sailed her round from Kituta to Kinyamkolo. The sailing powers of this old tank were remarkable; her rudder was too small, and she could only be made to head up to the wind by lashing a pole so that it projected at right angles from her length amidships, and

tying a heavy dug-out canoe on to the end of this. Thus arranged she would sail across the wind at any rate. After some days at Kinyamkolo she developed more pinholes, and these I corked up with the corks out of my collecting bottles; and one fine evening I proclaimed to Sambo, my head man, that I intended to start for Cameron Bay. The old chief of the village, however, when he heard of this, came up to me in a great state of mind. He said I must on no account go that night, as it was going to blow even in a manner such as I had never seen although I had come across the sea. Now it had been the most superb blue hot weather for many days, and this day looked like all the rest. Why, therefore, it should blow on that particular night I could not see, and in my ignorance and arrogance I told him so. He persisted, however, that it would blow that night, and that if I meant to go I should at any rate not start before four o'clock next morning. I therefore compromised, and we decided to start at midnight. Curiously enough at sunset on this particular day the breeze did freshen, warning gusts of it moaning through the leafless forest out of a clear green evening sky. About midnight, however, it had died down again, and I chaffed the old chief in the firelight about his prophecy, confident in my own powers of observation, but he merely shook me by the hand as if I had been a pump and said that we should be blown to pieces if we started. I do not think all his people shared his fears; any way one woman, who lived on the west coast of the lake, wished me to let her go in the boat as a passenger, and by eleven o'clock some twenty of my men, Sambo and the cook, had bundled into the boat, and we were off. The boat slipped silently out over the deep still

water, the men raising a wild chant as they pulled on the long oars, the air of which was this:

As we ran out of the lee of the rocks, a warm breeze filled the sails and we rippled away into the black mysterious expanse of the lake which lay before. For an hour or more all went well; the canoe remained lashed out at the end of the projecting spar, and I dozed in the stern of the rotten old tank as she drifted along. Later, however, I heard in a sort of dream Sambo and the cook talking, and the word "peppo" (wind) repeated so often that I woke up and looked round. The night was as bright and starlit as ever, but the land had now disappeared in the gloom behind, while away to the south whence we had come there was a long line of grey, spreading over the surface of the lake, and in the air there was a universal murmur like that of a distant sea. Sambo pointed to the grey line, and as I looked I became aware that it was nothing less than the surface of the lake which was being lashed into foam by the old chief's wind. Catspaws drifted before, over the surface of the lake, and filled the rotten sail. Little by little this wind increased and the old boat blundered along at twice her previous speed; the grey line swept nearer with an alarming velocity, and as it neared the wind ripped past the boat in whistling gusts, and the old sail bent and cracked as if it would fly to pieces

every minute. Huge white seas rose after us, and presently there came a crashing and crackling sound forward. I thought it was the mast going, but Sambo grabbed something over the side of the boat; this was the canoe, which had gone adrift. We ran the painter aft and lashed it to the stern, and for some time we flew on quietly enough, but the sea was gradually rising, and every now and then the huge form of some seventh wave would appear out of the dark starlit water behind, and walk majestically after us, till its crest toppled over into white foam that hissed and rushed under the stern as it drove ahead. These big waves converted the heavy dug-out canoe into a formidable battering ram, and two or three times she slid down their hollows with a rush that threatened to stave us in every minute. Sambo tried to loose the painter and to pay out more line, but the night was very dark. I tried and the cook tried, and while we were all struggling to get the painter adrift, a sea sent the canoe into our stern with a crash. I saw we were going to be smashed, so I seized the rope with one hand and gave a sweeping cut at it with my knife in the other. The result was not what I expected. Instead of the line giving way there arose a fearful yell, the cook bounded into the air, and back into the well of the boat, nearly upsetting us all, and the rope remained untouched. Before I had time to realise what had happened, a great sea walked after the canoe, which rose high in the air, and as the line came taut the front of the old dug-out broke away and she gradually fell behind, lying awkwardly among the big seas as we disappeared. We were for the moment safe, but a ceaseless sound of woe like that heard by

Dante through the gates of hell was rising loudly from the bottom of the boat. I crept forward with a light and Sambo to see what it was all about; the seats were splashed with blood, and there, in under them, lay the cook apparently weltering in his gore. Round his arm he had wound a piece of cloth, already saturated with blood, and when I unwound it I found his arm was cut and slashed in a frightful manner to the very bone. I had, in fact, been cutting at it instead of the rope, and this was why that rope had held. There was nothing to be done; we were rolling about in a fearful manner, the men were all hopelessly sick, lying about four deep on the top of one another in the bottom of the boat. We were drifting blindly out into the great lake in the dark, and the sea behind was a sight to behold. The whole lake seemed to be drawn out into long lines of hissing foam, between which were the great dark hollows of the waves, while in every motion of the boat and of the white-crested rollers there was that indescribable slow, stately progress which is so particularly characteristic of a really big sea. We lay sometimes this way, sometimes that, sometimes with the prow tilted up before us, sometimes perched in the stern on the crest of a wave, but always following the slow, majestic heave of the great waves that were drifting past; only if we had broached to, or the sails had gone, should we have felt suddenly the whirling force of the wind and sea behind.

After two or three hours the gale moderated, and I suggested to Sambo that we might cautiously head her a little to the west, so as to reach the nearest land. I thought it might be pleasant to breakfast on shore, and that on the whole walking was preferable to, and more

expeditious than, sailing, and we could then go on to Sumbu on foot. As the wind sank the sea sank as suddenly, and when the first flush of dawn fired the east among the stars we were lying easily on a great glassy swell. We were also now in a new world ; eastward the dark body of the lake lay, a heaving illimitable mass like the sea, while on our left there rose the huge line of rugged mountains standing over the lake in the wildest precipices thousands of feet in height. Over the surface of the water as we headed towards the land there came a delicious scent of flowers and honey, and round about us there were playing innumerable shoals of leaping silvery fish. As we drifted along the wind dropped altogether, and I ordered my sea-sick mariners to get out the oars and begin to row. They had hardly done this when we were startled by a huge dark, gleaming fish, which rushed at the blades like an infuriated shark. I grabbed my rifle, and, following the glittering mark, made sure I had drilled it, for after the report of the rifle the fish turned limply and floated for a second near the boat, but before we could secure it it gradually sank deeper and deeper, and finally disappeared. This fish is, I found on the present expedition, in reality a great bass which attains a length of about four feet. Shortly after sunrise we neared the shore and finally ran into a little bay, lying immediately beneath the huge sandstone precipices of the west coast. These mountains are regarded by the natives as the abodes of spirits, and it seems to me that there is very little reason why they should not be so regarded, for a more unearthly, mysterious-looking coast I never saw ; it was, in fact, just the place where one would expect to meet a snark. The beach was of yellow sand and white pebbles, and behind these there was a space of trees and yellow cotton flowers.

View from the North of Lake Kivu of the great active cone of Kirungu-cha-gungu and of the numerous secondary cones along the Northern shore of the Lake.

[*From a Photograph*

Everything, however, was over-shadowed and over-powered by the gigantic cliffs which stood in wild buttresses and towers of yellow sandstone thousands of feet above the beach. The worn crests of these great cliffs were fringed with forest trees, which looked like a mere growth of green mould, they were so far above us in the clear blue air. After a night such as we had passed, there is nothing so delightful as to give oneself up wholly to the delights of food and drink. We had not slept, we had been blundering through the surf for hours, expecting to go to the bottom every minute, and now the cook had recovered from his sea-sickness, and with one arm was making deliciously scented coffee and grilling the legs of a guinea fowl on a fire made out of the mimosa logs which lay on the beach. Under a great flat-crowned acacia, Sambo had set up a chair and a table with a cloth on it, and I lay at my length watching the great green rollers break up on the beach. Nowhere, if it were not for vile malaria, would there be a place like Central Africa for pure physical delight, nor one where you can be so utterly miserable when the rain pours and the waters are out yards deep over the country, when it is already dark and there is no prospect of a camping ground for miles. As I became cheered with good things my courage began to come back, and I felt that the sea was not such a bad place after all. If we embarked at once we should be round at Sumbu next day some time, but then of course there would be the chance of another of these terrible nights. Now Sambo was like unto the devil, in that he was a tempter of white men, and as I found out afterwards a tempter of them for his own base ends. And so on this particular occasion he suggested that round the next point there was a great river flowing into the lake up which we

could row the boat, and that this river led to Elysium, from whence it was quite easy to walk to Sumbu in half a day. I therefore yielded to his persuasions, and after breakfast we again set sail in the gentle day breeze, coming in the afternoon round a great corner to a land of reeds. Far away to the north there was another corner, but in between there was nothing but a V-shaped expanse of steaming marsh land. Near the northern corner of the V the river Lufu opened into the lake, a broad, deep stream, and up this stream we went, or I should say we were about to go, when from the remnants of the sea-sick blacks there emerged in a state of frenzy our female passenger. We were passing her village, it appeared, and I put the barge about, so that her relatives might fetch her off in a canoe. There were some twenty lying on the beach, and crowds of men and women were staring at us, but not one would shove off a boat to take our passenger ashore. One said he could not row, and another said he could not swim, while a third told us at the top of his voice that he owned no canoe on that beach and could use no one else's. I therefore ordered the sail to be hauled up again and we slid away up the stream. As soon as they saw we were going several canoes put off, but the wind was fresh, and do what they would we slipped up the stream before them. After an hour's pursuit these boats arrived at another village near the inner end of the swamps about two hundred yards behind us, and here more relatives of our passenger took up the chase; some ran on foot beside the river banks, some pulled up the stream in boats, and all yelled and shouted with laughter at the exceeding great humour of the white man. About five miles further up the wind dropped in a gorge, and our passenger was dis-

embarked amid tumultuous shouting of the crowd of natives who had followed in our wake.

In spite of Sambo's prophecies, I found nothing Elysian in this place we had reached; it did, in fact, far more forcibly to my mind suggest the gates of hell. The

A volcanic cliff on the North shore of Lake Kivu, with Western wall of the great Valley of the Lakes in the distance.

valley of the river had narrowed, and it now wound through a deep gorge, between steep, black and almost red-hot hills. Through this weird channel we punted and perspired until about four o'clock, when all at once the gorge came to an end, opening suddenly into a vast expanse, where we found ourselves in a great flat-bottomed basin fringed with steep and lofty hills. The flat was

covered with grass and many miles across. Its course ran east and west along the river, and to the south it was bounded by a line of lofty precipices very like those a few miles to the east, which we had seen in the morning falling into Tanganyika itself. This place is the Lwendwi valley, and some miles further up its bed there is an Arab village. We reached this about sunset, and I was courteously received by a young Arab called Kabunda, who appeared to be the feudal lord of the place. He was accompanied by a black Sultana who had been the old chief's wife. She was the blackest woman I ever saw, with a genial, wrinkled face. She wore an extraordinary garment, a sort of chemise, made of a circle of blue calico in which she had cut holes for her head and her arms. The skirt of this garment came about to her knees, and on each leg she wore several pounds of fine brass wire. These people gave me coffee in real cups, and as a great treat unearthed some biscuits which had become quite dark, having been handled for years by the Arab, his wives and his followers, and which as far as I could make out had been given to him by Joseph Thomson! He refused to allow me to put up my own tent, and with true Arab courtesy had one of his own put up instead. He was very anxious to know why I had come to Tanganyika, how long I was going to stop, and what I was going to do there. We lit pipes, and I told him I had come to fish—to see, in fact, how many kinds of fish there were in the lake, that it was interesting to the white Queen's people to know this. I told him also that I wanted shells and any other lake animals that there might be. At all this the black queen grinned, while Kabunda in his polite Arab way informed me that he regarded me as a really beautiful liar, that I was better at lying than even Nassa

bin Hassim, a grey old bird of an Arab who acted as priest to the household.

After he had gone I sat wondering what was the inwardness of Sambo's partiality for this place, for Sambo had been in this country before, under what conditions I

A nearer view of the volcanic cliffs on the North shore of Lake Kivu. showing the stratification of the ash.

could never clearly ascertain. Sambo had said nothing about this village. Sambo had also a habit of getting oiled all over and married whenever we stayed long enough in a place for the ceremony to be performed, and I began to divine that in all probability there was some

moon-faced beauty here of his former acquaintance, and that there would probably be trouble later. In this I was not wrong. We left the village next day at daybreak, and after bidding farewell to Kabunda and the black queen of the district, I set off on a stony path towards the hills. I had not gone far, however, before the well-known hubbub arose behind that invariably betokens a row, and looking back I discerned two ancient hags

Aden paddles his own canoe North of Lake Kivu.

approaching me and jabbering at the top of their voices. When they approached I learnt that my Askari had decamped with a daughter of each of them, both of whom he was going to marry on the first opportunity. The men came slowly up, and the two disobedient maidens were found carefully sandwiched in between the porters who were carrying loads. It was now a question of payment in cloth for compensation, and the docking of Sambo's pay to a proportionate amount. Thus ended my

first excursion to Sumbu in the Lwendwi valley, which is one of the most remarkable features of this district. It is now in possession of the son of an old Arab, and of the black Sultana in her blue cotton chemise with pounds of brass wire round her ankles. It is one of the most beautiful places in the world, and it has the reputation of being one of the most iniquitous among the natives. It was therefore beloved of Sambo, and it was for this reason that I was landed in it.

CHAPTER VII.

> "A ship was lying on the sunny main,
> Its sails were flagging in the breathless noon,
> Its shadow lay beyond."
>
> —SHELLEY.

FROM the recollections of my former journey which caused the digressions of the last chapter, I returned much against my will to the question of the *Good News*, that small, dilapidated, unsavoury craft round which Mr. Ewing, the managing director of the African Lakes Corporation, had told me in London that the commerce and development of the Tanganyika region were shortly going to centre. This was, of course, before I had arranged to charter the craft, and all the way up I had felt as if the African Lakes Corporation, Limited, was conferring upon the expedition a sort of generous gift, in the interests of pure science, in allowing me to charter this boat at any price; for she was the only steamer on Tanganyika—that is, in a district of such momentous, such supreme importance as Northern Rhodesia. Fortunately, the powers that be have bestowed on man a saving sense of the humour of things, and through this blessing one can laugh in places, even in the inside of that steamer, and under circumstances where the practical or human part of our being would infallibly resort to dynamite. The condition of the boat was beyond all description, and it was notorious throughout the

land; even the rough hardihood of a Scotch boiler maker revolted when I suggested on the verandah of the new mission at Kinyamkolo, that my object in coming was to get him to renovate her cockroachy and cow-dung-bespattered inside. It was one thing to build a section boat for the Congo Free State on the sweltering shores of Tanganyika; it was another to attempt to do anything with the Augean stable of the *Good News*. I pointed out to him, however, what great ends of science would be served; I showed him that, if he would only mend that steamer, the people who must shortly flock into this much boomed land of super-heated promise would at any rate have new shells and jellyfish to look at; and finally, when his silence at my fervid, if unintelligible, eloquence appeared to give consent, I pointed out how, if he would get her to steam, I would do all I could do as the leader of the Tanganyika Expedition to impress his employers with the extraordinary nature of the services which he had rendered that expedition, because to clean that steamer was no joke. And I prevailed.

We returned to Kituta; we took the *Good News* over to Kalambo, we took also four oil drums of cockroaches as big as locusts out of her inside, we filled her with hot water and Izal, and corrosive sublimate, and carbolic acid, and Condy's fluid, and Keating's insect powder, and finally we tightened up her joints. We screwed on a new cylinder top and lighted up her fires, till she snorted and grunted and shook like a coffee mill, and finally moved out over the hot oily water of the lake, no less than three miles in one hour. We had accomplished our ends; we had not only demonstrated to our satisfaction that there was a steamer on Tanganyika, but also that, with great care and extremely gentle treatment, she would go, and

much might be expected of her. She would at any rate suffice for me to get my shells and jellyfish. We therefore decided to start up the lake, first going to Kalambo, then to Sumbu, and then away to the north. We crossed the lake without breakdown, and reached Sumbu, at the extreme south-west of the great gulf known as Cameron Bay, just as the last rays of the sun were flaring over the forest which stretches thence to Mwero, and on the following day we finally set out for the north.

The northern coast of the gulf in which Sumbu lies is formed by a lofty range of steep forest-clad mountains, which terminate to the east in the desolate headland of Nbogo. The wind had freshened as we neared the point, raising the dark blue water into crested waves, which made the old tub rattle and shake. The headland itself is a mighty mass of almost black rock, rising out of deep water to a height of seven or eight hundred feet; when rounded, it sweeps back to the west, and stands above a low coast of fantastic bays and islands, where there were numbers of solitary black natives perched on the rocks, fishing like cormorants. Not far beyond, and behind a small hill, is the village of Mlelos, and here we cast anchor, just as it grew dark. We went on shore later to take observations, but found it in possession of flies; little soft-winged, soft-bodied brutes, that squeaked and whistled round our heads. They walked in dozens into our eyes, and down our throats, and into our ears. They swarmed through the air holes in the lamp till it went out, and crawled in thousands over the bright silver rims and circles of the theodolite, while all around in the hot darkness there rose the clamour of innumerable frogs. Some of these twanged like the strings of a harp, some brayed like a cross between a sheep and a donkey, while there was one peculiar

deep wet-voiced individual in the corner of the bay who came into the general chorus only at intervals, like a double bass.

Next day we left early, and struck diagonally up the lake. We had steamed in a north-easterly direction for some two hours, and then the engines came suddenly to a

On the North shore of Lake Kivu.

standstill; something had worked loose, and till Fergusson and the native engine boy had got it right, it was impossible to move. As we lay idly on the warm, oily water, about five miles off the great cliffs of the harbourless west coast, I sat and smoked, for I judged from the expletives which now and then became audible in the engine-room, that it would be better not to enquire what was wrong. I also wondered what would happen to us in this old

craft if something came loose in this sort of way while we were off such a coast as that which lay away to the west and there was a gale blowing towards it. There was hardly a plate in the old tub that would stand even being run on a soft sandy beach, and it was not pleasant to reflect what would happen if we were blown aground on that iron-bound coast, round the black rocks, in front of which the surf wheeled in circles. All this, however, was in the future; at the moment there was no wind, and the sea was an oily sheet of glassy blueness, shut in above by the warm, unfathomably deeper blueness of the sky, and crossed to the west by the rocky outlines of capes and bays, as weird and fantastic as those upon which the sirens sang of old. The early noon sun was flaming above, and we were silently drifting, with the slight swell and the slighter breeze, into the little known northern waters of the great lake. The men lay idly about the decks and I threw out a line, some three hundred yards of it, with a patent spinner on the end, a spinner which looked bright enough and big enough to catch a shark. In a little while there was a jerk on the line and a splash far behind, and I found I had hooked some big silvery fish, which pulled with great vigour as I hauled it in. It turned out to be an immense bass, the same kind of fish, in fact, which had attacked my paddles when on the way to Sumbu, on my former visit to the lake. After about an hour the steamer began to snort and rattle again, and we lumbered along once more towards the opposite coast. It was almost dark, however, when we neared the land, coming in with much caution among the rocky islands, that rose in all directions, carrying tufts of trees above

their huge grey rocks. The water round these islands is deep, and it was quite dark before we reached an anchorage near the actual coast. To right and left high rocky mountains towered up among the stars, while in front there lay what appeared to be a wall

The start at sunrise North from Lake Kivu.

of solid rock some thousand yards away to the east. As we cautiously slid on I was standing in the bows, and just about to call out to the boy to slow the engines, when we suddenly touched ground with a gentle bump; at the same time, the seeming wall of

rock ahead suddenly showed up right under our bows, and resolved itself as suddenly, not into rock at all, but into the tall wall of reeds fringing a river's mouth. The crew leaped overboard with a yell, and pushed the steamer off again, and we finally anchored about forty or fifty yards from the beach. This place was Msambu, and next morning we found it was a very weird and very hot place indeed. All round there were innumerable islands formed of huge boulder-like rocks, which had been weathered into massive rounded forms, appearing now exactly as if they had been piled in heaps during the games of giants all about the place. It was indeed these same fantastic products of weathering and denudation which suggested to Stanley the view that there had been in this part of Tanganyika some vast convulsion, of which the curiously piled and rounded rocks were the remains.

We stayed two days in Msambu, fishing with nets and lines and killing rock fishes wholesale with dynamite. In this way I found several entirely new species, and we finally set out once more on our voyage north.

It was also about this time that the different individualities of our men began to make themselves apparent. We had with us on the boat our Zanzibari head man, Omari bin Omari, a fine upstanding, soldierly figure, with a curiously soft voice and pleasant manner. We had also his son, Omari Kidogo, or in English "Omari the Little," and we had as well my Somali boy Aden, who spoke both English and Hindustani besides Somali. Of this person's sense of humour I had already had occasion to become aware, for while we were at Karonga, at the North of Lake

Nyassa, he had come to me one day complaining that he had nothing to eat. There was a store at Karonga, where they kept rice and other things which natives generally want. I sent him with a note to the European agent, asking him to give this boy what he wanted, and charge it to my account. I expected, of course, he would get some pounds of rice, and possibly some sugar and tea, both of which Somalis like. When we left, however, the agent presented me with a bill about two feet long, among the items of which were included coffee, sugar, tea, rice, preserved milk, figs, salt, butter, flour, biscuits, curry powder, eau de cologne, and jam. In fact, there was enough stuff to stock a small country shop. I therefore called the Somali up and asked him what he was going to do with all these goods, and how he was going to carry them. To which he replied he did not know, but that he was a Somali, and fed "just like a European, sah, just like a European." I informed him that possibly he did, but that on this occasion he must learn to feed as other Somalis fed, and that all this stuff would have to be returned, with the exception of the sugar and the tea. And after this one attempt at trying it on, he made an excellent boy. He was a good tailor, and he knew how to look after the odds and ends in one's tent. Somalis are generally just like children; when we landed at Chindé, this boy was carrying some things of mine from the beach, into the pale of the English concession. It was after hours, and the native guard refused to let him through. As he foolishly persisted they seized him and knocked him about with their rifle butts, taking his bundle up to the consulate. Later on I found him sitting discon-

solate on the beach, looking mournfully out over the waste of the ocean towards Somaliland, like a bronze statue of despair. When he saw me, he exclaimed, "This place no dam good, sah. This bad place, full of bad dam people, me go to find you in the fort, sah; but plenty thieves in this place, they hit me and take your things, sah; me want to go back to Somaliland right away." His use of correct English and American idioms was very amusing. One day on Kivu, when we were coasting up the lake, he suddenly suggested to me about three o'clock in the afternoon that we should camp. I told him it was too early, but he said, "Good place here, sah, camp; we go on no place, then dark; when dark and no camp, then gentlemens they comes in, and it is all bloody fool and damnation."

The old pilot who belonged to the boat was called Kigara; he was the navigating officer and wheelman, and the men said he could steer while he was asleep. Perhaps he could. I found out, anyway, that he could sleep while he steered. He was a weird, wrinkled, tall, gaunt man about six feet two, with a partiality for strong drink. Not that he got drunk, but that he liked it. There was an engine boy called Germin, who wore the cockroach-hunting engineer's gold-laced cap and very little else, and looked like an ebony caricature of a Cornish fisherman; and there was Juma, a sort of head man of the crew.

The more I saw of Omari the better I liked him, and he turned out to be, in fact, one of the best head men I have ever known. In Zanzibar he was a person of some importance; the men respected his direct speech and his big imposing form, and I never

saw a porter or any of the men disobey or question an order from him. It is of very little importance in British Central Africa, or in the better known parts of the country, what kind of head man one has, but in the more remote interior, African travel depends as largely upon the head man as does an army upon its sergeants. It is the native head man, and the native head man only, who can tell you the real condition of the porters, when in any particular place, whether they have food and shelter, and anything else it may be necessary to know. It is the head man who can work the whole caravan into good humour towards the European leaders, for although the porters will agree to anything the leaders say, it is only the head man who can explain the necessities of the case from a native point of view, and get the natives themselves to believe that the Europeans are neither fools nor playthings. Talking about Omari leads to other reflections concerning natives. I have always felt that there is something really pathetic, at any rate to me, about a black man, when he is better than a black man ought to be. They are sometimes so infinitely superior in every human attribute to many of our white acquaintances, and yet in spite of it they are niggers still. It is probable that all men of this sort are to be pitied; it is therefore also probable that all men are pitiable, whether white or black, except the cut-throat and the costermonger "when he has finished jumping on his mother." So it seems that reflecting upon niggers who are better than they should be, leads to the belief that it is only the criminals among mankind who are not to be pitied, a singular state of mind to have arrived at on Lake Tanganyika. But as a matter of

fact the great African lakes are apt to cause many reflections besides those from their perennially summer skies.

On our journey north from Msambu we encountered another blow, this time from the north-west, and during the day. The early morning was bright and warm, and so the day continued till about ten o'clock, when a fresh breeze rose, which flicked the blue water into dancing white crests, and, gradually increasing in strength, by eleven it was blowing a pretty stiff gale right on our bows. The waves, moreover, had risen in proportion, and the little steamer doing her three and a half knots per hour plunged into the great blue waves, hardly making any headway at all, while the screw raced in an ominous manner. We were not more than half a mile from the rocky coast peculiar to the place, and as the gale and sea increased, we anxiously waited for something to smash in the crazy engine room, for, if it had, we should instantly have gone to pieces on those tall grey rocks over which the surf spurted in white jets to leeward. We remained thus hour after hour, wondering how long it would be before something gave way, but all the time the sky remained serene and clear, and the sun came slanting through the great waves in marvellous blues and greens, and lighting up their dazzling crests of spray. Late in the afternoon the gale had somewhat moderated, and in spite of wind and sea we succeeded in getting round a headland as far as Kirendo, turning sharply in among the wooded islands, and rolling fearfully.. At Kirendo there is one of Cardinal Lavigerie's mission stations of White Fathers, and on landing I received a note from the Father Superior asking in the name of all things for curry powder, as he naturally supposed that we were the cockroach-hunting skipper of former days. Fergusson and I called on them late in the

afternoon and sat long on the verandah of this solitary European Mission, in the midst of the still, dark, African interior, for there was a sublime view to the north over a vast marshy plain, which was bounded to the west by the yellow sand of the shore and the lake, and to the east by the lonely inland hills. The green and gold of the

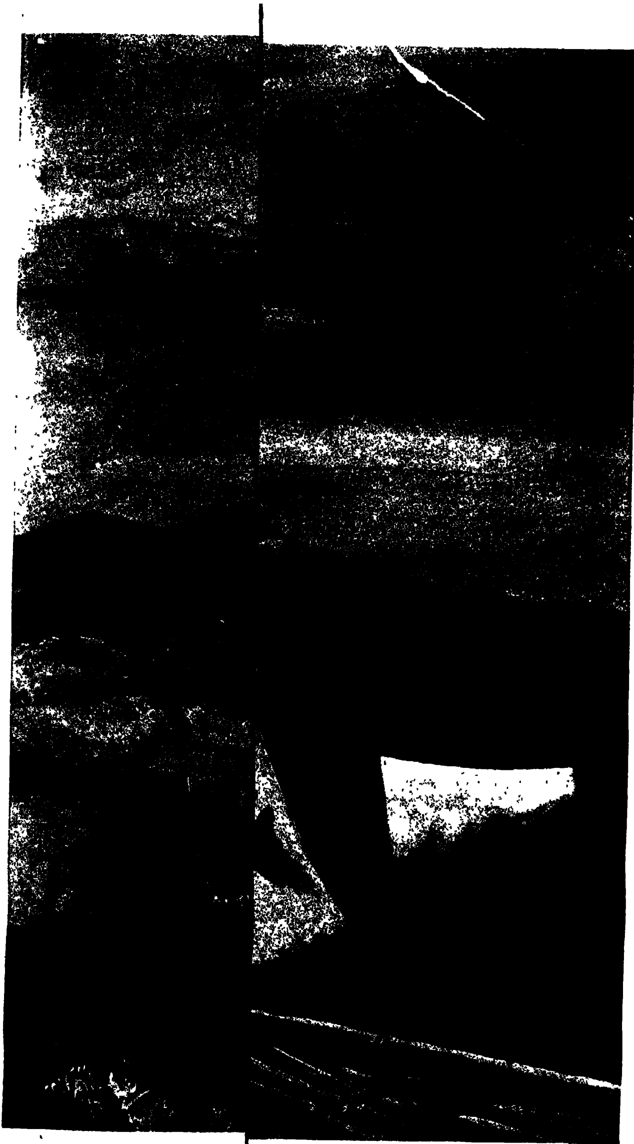
A camp in the famine-stricken country North of Lake Kivu.

plain and the superb blue of the sky above the still ruffled surface of the lake, made up a wonderful colour effect to the north, while there was at the same time the marvellous African clearness in the air, whereby every crag and outline of the lofty mountains was delicately clear and sharp, although they must have been sixty miles away.

It was here for the first time that we began to perceive

that we were running out of the climate of the southern tropics into that of the Equator itself. On Nyassa there is one long wet season, beginning in November and lasting till April, and one long dry season which fills up the rest of the year. At the south end of Tanganyika the dry season begins in May and lasts till September, when there is generally a short spell of rain for about three weeks ; after this the weather remains dry till about Christmas, when the long rains begin. As one goes north from this point the short rains become longer and the long rains become shorter, until, in the equatorial region, the rains follow the sun almost exactly ; that is, whenever the sun is overhead it rains, and there are therefore two wet seasons and two dry seasons, two springs and two autumns, two summers and two winters, so that in these parts you really do succeed in living so fast that you get two whole years into one. On Tanganyika, as on Nyassa, it is at the beginning and the end of the dry season that the big gales occur. We were now near the interval between the little rains and the long rains ; the weather was gradually becoming damper and hotter, while in the afternoon immense white clouds would gather over the distant mountains, rising towards sunset into huge fantastic shapes, over the cavernous hollows and promontories of which lightning played for hours in brilliant straggling threads, now red, now green, now blue.

Very often at this time, the end of the dry season, when the surface of the ground and the lakes is very hot, there occur the most wonderful mirage effects. They appear generally in an exaggerated form, of what sailors call the sea line, when the capes and islands appear to be raised above the ground and flying in the air. The effect is produced by the reflection of these capes and islands



7.000 feet.

[*From a Photograph.*

appearing in the hot air, which covers the lakes as if it were a thick sheet of glass, and I once saw a beautiful example of this sort of mirage on Lake Shirwa. There was a long line of huge white storks, more than a hundred of them flying away from me over the lake; they were gradually descending towards the reflecting surface of the hot air, and as they neared this, in the distance their reflected images were distinctly visible in the air surface, each bird above gradually approaching its inverted image below, till they came together, when both suddenly disappeared below the air surface, as if they had dived into the water of the lake itself. The meteorological conditions of Central Africa are a never-ending source of interest. In season, and sometimes out of it, when I ought to have been fishing or attending to the endless requirements of the men, I have spent hours and hours watching the sublime procession of events which is for ever going forward at certain seasons in the sky. Storm and sunshine alternate here, not as they do with us, in badly differentiated spells of good and bad weather, but with a local suddenness and fury that suggest our experiences of the meteorological cataclysms produced sometimes in pantomimes, or in the vivid scenery of the dramas at the Lyceum.

During the dry season the wind blows more or less steadily from the south-east, and the first intimation of the approaching rain is a disturbance of the regularity of these winds. Fits of fury alternate with periods of stifling calm, and during these, if one has the opportunity, it is well to go up on some high mountain top, about seven or eight thousand feet in the air, for it is at such times and from such places that we can watch in every detail the formation of tropical storms. I once spent a

whole day in this way lying on my stomach, on a mountain about seven thousand feet high, which looked over Lake Nyassa, while my friend, Mr. Crawshay, ran breathlessly about after butterflies, to the huge delight of the men I had brought up with me, and who were not used to him. About two thousand feet above the

View over the clouds, and of the extinct cones of Sabieen and Karisimbi from the summit of the active Kirungu-cha-gungu at an altitude of 11,350 feet.

surface of the lake—that is, about four thousand feet above the sea—there was an air surface which showed a faint reflection of the distant hills to the east fifty miles away. This lower mass of air was in contact with the hot plains and with the lake itself, and every now and then a spout of air would burst as it were through the reflecting surface, as if it were a skin, its course being marked by a rapidly rising cloud. These clouds grew

like those coming from a locomotive funnel, but on a vast scale, and as they towered up twenty to thirty thousand feet in the air, a black deluge of rain could be seen pouring from their centres, and trailing over the plains, or over the surface of the lake. Again and again these clouds would rise, first as a little puff of white vapour, like that of a cannon shot, but which rapidly grew and bellied out into a huge mass thirty thousand feet in height. At the top of such masses the mist spreads gradually out in the upper air into a thin canopy, which opens like a huge umbrella, and encloses and overshadows the cumulus core. After rain has fallen for some time these great cloud structures disintegrate, and finally topple about the sky in those sublime dissolving cloud shapes which, when lit up by the sunset, form one of the most marvellous features of this portion of the world.

CHAPTER VIII.

"We have had enough of action and of motion we,
Roll'd to starboard, Roll'd to larboard when the surge was seething free,
Where the wallowing monster spouted his foam-fountains in the sea."
—*The Lotos-eaters.*

FROM Kirendo we again journeyed north, and, after another gale from the north-west, reached Mpimbi, where the White Fathers have another small mission, not far south of the ill-fated station of Karama. From this place we again set out in the evening, intending to go diagonally across the lake to Tembwi, in the Congo Free State. When we left the wind had dropped, but there was still a heavy swell running from the north-west. What wind there was now came from the south-east, and we were consequently pitching leisurely into the swell. The wind was passing us, and the sparks from the wood fire in the engine room were flying forward. After we had shown Kigera what stars to steer by I could see these sparks flying across the hatch from where I lay on my bunk in the saloon. I saw them flying thus as we pitched along for several hours, and then I must have slept for some time. When I woke we were no longer pitching easily, but were rolling in a frantic manner; the sparks, moreover, were no longer

flying forward, but across from right to left. We must for some reason have changed our course, and when I got up on deck I found that the sky had become overcast, that Kigera had lost his stars, and that by the compass, which he never could learn to read, we were heading south-west again down the middle of the lake. How long we had been steering thus I could not say, but it must have been for several hours, for as soon as it became daylight, after reverting to our original course, the promontory beside Kirendo was still but a few miles to the south. Instead, therefore, of running for Tembwi, we headed off towards a point called Kibogo, where there was an island marked on the map. With a steamer like the *Good News* an island is always a useful thing, for if it blows, and the worst having come to the worst, there is no anchorage, one can at any rate lie about on the lee side of it. We steamed until the afternoon, and about five o'clock came into a most extraordinary place. The low coast line was flanked inland by a long mass of lonely, solemn mountains, which ran from this place north as far as Edith Bay, while the mass of rock which is represented on Code Hore's map as an island was now, we found, connected with the mainland by a sand spit, a sort of Chesil Bank in miniature. To the leeward of the bank there lay a native dhow, the occupants of which were camped on the bank. They bolted when they first saw us, but afterwards sold us fowls for cloth, etc.; they also showed some of our men the way to a village where they could buy grain and bananas for themselves. On the beach there were several couple of wild duck, and on the scrubby plains bordering the lake a certain amount

of game. After staying in this singular place shooting and fishing for a couple of days, we finally set out for Tembwi, and crossed without incident of any sort, the journey just occupying the whole day. During the voyage the lofty northern end of the Kibogo mountains showed up magnificently, one peak being a splendid precipitous mass, probably not far short of twelve thousand feet in height. From Tembwi it was my intention to go north along the coast as far as the Luakuga river, which forms the outlet of Tanganyika, and after spending two days at Tembwi, shooting and fishing and dredging, we proceeded to carry this project out.

Immediately north of Tembwi the west coast of Tanganyika has a very peculiar appearance. It is formed of rounded, apparently water-worn rock faces, which rise steeply and bare from the water's edge, and then sweep more gradually into a mountainous forest belt, which is topped inland by a number of lonely grassy summits. In the rock faces of the shore there are caves and gullies, within and about which the long swells of the lake spout and boom, like those of some great ocean coast.

The whole of the land to the west, from Mleloes on Tanganyika to Lake Kivu itself, is of a very rugged mountainous character, deep and damp forest-clad glens ramifying in all directions between huge rounded domes of granite, covered with short grass, and rising to a height of six to eight thousand feet. The country is trackless and unmapped, the people are wild and not too friendly, and it is only at Mleloes and Mtoa that the officials of the Congo Free State have attempted to hold any portion of the lake.

Their hold on these points is, however, anything but secure, and at the time of our visit the whole of the coast north of Mtoa was in a state of open war and chaos, owing to the presence of bands of rebel soldiers, who were more or less successfully resisting the Congo

View across the great Valley of the Lakes from the Northern slopes of the Mfumbiro Mountains.

authorities and waging war on their own account on the natives round about.

But to return to the Luakuga. It may be remembered by those interested in the early exploration of the great African Lakes that when Stanley and Livingstone looked for the outlet of the lake in 1875 they did not find it at the north end, and that the Arabs

told them that the lake had no outlet at all. Subsequently Stanley visited the Luakuga, and had to place straws upon the surface of the river to see which way the water ran. So also Cameron described it as blocked by a dam of tropical vegetation. Joseph Thomson, on the other hand, crossed it below the lake, and found it there, as he said, a great river, which was "whirling away to the west"; and finally Code Hore found it in the same condition. Thus, from these different observations, taken at different dates, it would appear that Tanganyika has at some time overflowed, and at others not overflowed, into the sea, the existence of these periods of stagnation is probably, at least in part, the cause of the slight salinity of the water of the lake. Further, if we examine the pictures given by Stanley of the south end of the lake, we find that there are a number of tall old trees standing near the shore at Kituta, immediately behind the beach where he had moored his boats. The same trees are standing in the same place now, but the beach has become nearly a mile wide; it has, in fact, become converted into a great sandy plain, covered with plantations and wild cotton flowers. It is obvious from this and similar observations which can be made all round the lake, that the water has fallen rapidly within the last few years. It is also true, as we have seen, that at certain periods the Luakuga has not flowed out, or hardly flowed out at all, and it seems extremely probable that in its course some obstacle finally gave way, whereby the water of the whole lake gradually sank until it reached its present level. My own impression about the matter is, that it is some soft rock bar that has disappeared from its course,

and that the lake will never again rise to its old level, for there is no evidence of a tendency for a dam of vegetation to be formed periodically, such as Cameron supposed. The matter, however, is more fully discussed in the volume dealing with the scientific results of the present expedition.

Cannibals on the plains.

The Luakuga flows out of Tanganyika through a gap in the vast western wall of the lake, and its mouth is fronted by an immense plain of sand, now covered with reeds, with pools of stagnant water and scattered clumps of trees. Running in towards the coast, we found it to be made up of very lumpy irregular little hills of sandstone,

fringed by a long gleaming line of yellow shore sand. One valley near the coast seemed to be lower than the rest, and where it approached the lake it looked from the deck of our steamer actually lower than the lake itself. This the men said was the opening of the Luakuga. Among other tall stories I had heard on the way up, I had been warned of the great danger of being swept into this river, steamer and all, by the swift outrush of water from the lake. I had been told of Arab dhows being carried away over its rapids out of sight and out of mind, by people who said they had been on the spot; and so as we approached the coast we were careful to keep well away from the mouth, crossing far out to the north, and then standing in towards the land. As we approached, the water grew very shallow, and at least two miles from shore was no more than three fathoms deep, and we ultimately anchored in an absolutely exposed position about a thousand yards from the beach.

Next morning Fergusson and I landed and marched along the sand in company with a crowd of yelling friendly niggers, who came to escort us to the unique out-flowing Luakuga, their own particular river. The shore was covered with innumerable game tracks, and the gelatinous eggs of molluscs; we crossed a small stream flowing into the lake, and finally came to the Luakuga itself. The river consisted of a very shallow, insignificant out-flowing stream of water not more than a foot deep, and leaving the lake by three or four small channels, each about the size of an English trout stream. As we passed down the course of the river these streams collected into one channel, which, after a short distance, took a sharp bend to the south, running round a high, soft sandstone bluff; and here it was obvious from the old cuttings and pot-holes that the river at one time had been of considerable mag-

dnitude, that instead of being but a few feet deep and perhaps ten yards wide, there had been at least a hundred feet of water flowing down with great force, and some hundreds of yards in width. This excursion completed, I returned to the steamer rather anxiously, for a fresh breeze was blowing, and the beach, off which she was

A village garden on the plains North of the Mfumbiro Mountains in the floor of the great Valley of the Lakes.

anchored, lay open to the south-east sweep of the lake. We left at once for Mtoa, and came in amongst the picturesque islands which surround the place about ten o'clock at night. It was indeed very fortunate we left the Luakuga when we did, for a terrific gale arose in the night, and although we appeared to be completely sheltered where we

lay, I was constantly up, fearing that the anchors might drag owing to the wind and surf.

Mtoa is now the head-quarters of the officers of the Congo Free State upon Tanganyika, and after an early breakfast on board our boat we went on shore to pay them our respects. I wanted also to ask their views about the Luakuga. They received us most cordially, but although they were but some thirty miles from the outlet of Tanganyika, none of these officers had ever visited the place; in fact, they seemed much more bent on bringing Europe into Africa than in getting to know anything about Africa from a European standpoint. We found them under a broad, shady verandah, arranged just as it would have been in a Brussels café; they were sitting at little round tables and drinking absinthe, at which we joined them, and talked bad French and Swahili mixed, until our hosts took us in to lunch in a neat summer-house used as a mess-room, which let in the glorious view of the lake through the wooden pillars on which its roof was supported. The table was covered with flowers and the portraits of pretty French actresses, and I remember that there was also a most delicious salad and some real red wine, and that we finally all stood up and drank the health of the King of the Belgians. While we were there, one of the officers, who had gone up the lake to attempt to relieve Captain Haec in his operations against the rebel soldiers, returned to Mtoa in a dhow; he came up the path gesticulating and explaining everything to everybody in rapid French, accompanied by rough diagrams on the leaves of his note-book, which were blowing all over the place, and on which were depicted the positions from which his dhow had been fired at by the enemy. There were bullets in his boat, bullets in his hat, bullets everywhere; he was very

hot, he was covered with Tanganyika dust, and filled with French military glory. When we left Mtoa it was already late, and before we had cleared the rocky islands covered with trees, which form the harbour, it was well into the afternoon. As we passed out into the great blue body of the lake it became apparent that the wind of the previous night had risen again, and that we were again going to have a boisterous time; in fact, we rolled dismally from the first, and ever more dismally as we went along. The cursed old tub jangled and rattled to such a degree that both Fergusson and I were continually starting up with the idea that the engines had at last fallen bodily through, into the bottom of the lake. Towards evening the sea grew enormous, and the wind from being south-east veered into the east, so that we lurched over the old sea and rolled in the trough of the new. Our hands got stiff with holding on to the rails, or anything else we could clutch, and it was a great relief when at last we got north of the vast watery expansion of the lake which lies opposite Mtoa, and out of which the wind brought the seas like battering rams right on our beam. It was late before we finally ran in under the coast, but at last it loomed gloomily up in the wild evening light, a wilderness of crags and rocks and trees. Kigara knew his way, however, and we at last slipped in between two forest-clad headlands, finding ourselves at rest in the smooth water of the beautiful little harbour of Masswa. The bay ends in a long horseshoe-shaped stretch of sand, beyond which were the dim outlines of heavy woods. Later on the moon rose, and jackals came down on to the sand howling dismally at the boat. We slept the dreamless sleep of the tired, and awoke to find that the sun was already up over the fragrant inland woods, and that the men who had set my trammel

net the night before were already bringing it in, laden with huge crabs and glittering silvery fish.

In the afternoon we steamed out to dredge, but after about two hours decided to put back again, for a wild storm had gathered over the mountains in the east, and fierce squalls of wind came flying off the land, lashing the water up into bristling lines of foam. The old boat could scarcely make any way against the wind, and as we slowly, very slowly, forged back into the bay in its teeth, the storm was upon us. The heavens literally scowled, huge dark clouds rolled overhead, showing vast rents and chasms in their drifting forms, while underneath from the east advanced a dark blank arch of rain. From the edge of this and from the clouds themselves vivid lightning played without intermission, now flying in wild erratic vibrating tracks, now falling, a single steel-blue streak across the rain sheet, to the ground. The noise of the thunder grew absolutely deafening, and as the rain swept over us with a dull roar the outer world seemed to sink suddenly into a mysterious, indistinct, rustling, watery gloom, which was lit only, but lit every instant, by the blue flare of the lightning, and shaken with the continuous sonorous boom and the sharp spluttering crash of the thunder. I confess I don't like thunderstorms. English ones are bad enough, but these tropical pandemoniums are a bit too much; they have only one redeeming point, they go almost as quickly as they come. In an hour the sky was as serene and clear as ever, while in the air was the freshness of rain; the bay resounded with frogs—frogs that piped, and frogs that whistled, frogs that trumpeted like elephants, and frogs that banged on big drums. A superb scent of flowers and honey drifted from the warm green land, mixed with the singular smell of

recent rain. Everything seemed, indeed, to have become suddenly full of the essence of all that is delightful in a country where there is always summer, summer all the year round, through all the seasons, and always has been through all the years since Africa has been Africa at all.

Men cutting up a Hartebeest on the desert plains South of the Albert Edward Nyanza.

CHAPTER IX.

> There stands a city—neither large nor small,
>   Its air and situation sweet and pretty.
> It matters very little—if at all—
>   Whether its denizens are dull or witty;
> Whether the ladies there are short or tall,
>   Brunettes or blondes, only there stands a city!"
>
> —*The Ghost.*

On my former expedition, when Tanganyika itself was my northern turning point, I had often looked over the limitless sheets of the huge lake, trying to conjure up in my imagination what the rest of it might be like, and trying to picture more particularly what were the surroundings and the peculiar features of the Arab town of Ujiji. For Ujiji is the one place in the whole of the African interior which can be called a town; that is, a place where there are stone buildings and live Arabs in plenty, as well as the monotonous naked black. The place, moreover, is famous in the annals of early African exploration, for Ujiji is redolent with the memories of the past. Except that the mango trees have grown bigger, and the lake has receded from its old front noticeably, I do not think it has in other ways much changed since the day on which Burton first saw it and the great lake he had discovered, in 1856. It was here that Livingstone was so long lost, and it was here that Stanley found him. The house in which this meeting took place is, I

am told, now pulled down, but the mango tree they planted is still there and flourishing among the self-same clump of palms that were growing at the time. Many of the old Arabs I saw there still remembered Livingstone, but I did not come across any who recollected either Burton or Speke. Unlike the districts bordering the Stevenson road and the south-east of Tanganyika, those round Ujiji are now fully under the German sway. There is a picturesque stone fort overlooking the town, and the Germans are firmly established both here and at the north end of the lake. In this I think they have shown their usual good sense, for a large portion of the country to the south, as for example that about the ill-fated station of Karema, is as worthless as the whole of the British territory still further to the south, right away to Nyassa. On the other hand, the country about Ujiji, and especially to the north of it, is good agriculturally speaking, producing quantities of mangoes, oil palms, and grain. The soil is deep and well watered, and it is here for the first time that one escapes from the monotonous thin arid forests of the south. All about Ujiji the country is open and grassy, and affords pasturage for huge herds of cattle with enormous horns. On landing I was met by some well-dressed Arabs, who saluted after the manner of Arabs, and escorted me to the German fort, through the tortuous ways of the town. Half-way there I was met by the German lieutenant in charge of the station, Baron Münchhausen, who, together with Dr. Felthmann, received us in the most cordial manner. We drank lager beer, in fact, and, what was perhaps really pleasanter still, were informed that there would probably be no difficulty in our going north to Kivu. It was true, the Baron informed us, that the rebel soldiers were somewhere near the mouth of

the Rusisi river, but there was already a German camp there, which would afford us ample protection, should it become necessary. It was also true that Captain Haec, the Belgian commandant, was pushing up with a large force to the north from Mtoa, and that there might be fighting in the neighbourhood of the Rusisi mouth. The only thing we had to fear was that, after these encounters, bands of fugitive rebels might cross the Rusisi and be troublesome along our route. The next question which presented itself was that of raising the requisite number of men, and this eventually proved the most formidable of all. Large numbers of the best of the Ujiji porters had already been drafted by the Germans themselves for their military operations. Both Baron Münchhausen and the Arab, Bin-Sef-Rachid, informed us that it would be no easy matter to raise even 150 men within any reasonable time, and I should have liked 250 at least. Moreover, porters had returned to Ujiji, spreading reports all over the district that the English, as masters, were "kali sana" (very fierce), so that the men in Ujiji were not at all anxious to serve. All this made the question of transport look extremely grave. Baron Münchhausen advised me to leave my head-man, Omari, who had served on Colonel MacDonald's disastrous excursion into Uganda and was experienced in such matters, to stay with Bin-Sef-Rachid, so that his own account of my personal attributes would counteract the impression prevalent about the English. In accordance with these suggestions, I arranged with Bin-Sef-Rachid that Omari should stay with him, while we went on in the steamer to the north end of the lake, and that during our return journey to the south end of the lake and back again, he and Bin-Sef should try to collect as many porters at Ujiji as they could.

Owing to the fall in the lake it has become impossible for a boat drawing more than three feet of water to lie in what used to be the old harbour of Ujiji immediately to the south, while the roadstead opposite the town is anything but safe, as it lies completely open to the full sweep of the lake. There is, however, a beautiful little harbour, about ten miles to the north, known as Kigoma,

Men cutting up game on the great game plains South of the Albert Edward Nyanza.

and which is in reality the best harbour on Tanganyika. It has, however, in conformity with the whole of the northern third of the lake, one drawback: wood is extremely difficult to obtain. The natives of this district are great workers in metal and wire, producing a variety of spears, both copper and iron, swords with wooden handles, which are skilfully ornamented with brass and iron wire, and a variety of other things. All these things, together with goats, eggs and milk, they barter with great

zest for blue and white beads and cloth. The women about Ujiji are better-looking, or rather, they are not so desperately ill-favoured as their dark sisters in the more southern portions of the lake and throughout British Central Africa, but I have considerable doubts as to whether this change is due to Arab admixture, since the same alteration for the better is witnessed amongst the tribes away to the north, where few or no Arabs have ever been.

North of Ujiji both coasts of the lake are extremely steep and rugged; indeed, that on the east all the way from Ujiji to Usambura at the extreme north end is, with the exception of one or two broad deltas, formed simply by the steep side of a range of high and rugged mountains which here plunge in superb green slopes into the lake. So steep is the coast-line that, on two or three occasions when we tried to anchor while the men cut wood for the engines, we found it impossible, owing to the great depth of the water right up to the coast. Unlike the country south of Ujiji, that to the north of it is, as I have said, open and grassy, and every valley which we passed seemed to be full of palms, bananas, and plantations of various sorts of grain, peas, beans, and pumpkins. In most pleasing contrast with the half-starved and arid wildernesses of northern Charterland, there is here any quantity of food, such as eggs, goats, sheep, fowls, and splendid honey, while the soil is magnificently rich and deep. Moreover, the climate of these districts, although as at Ujiji warm, has none of the overpowering stifling heat of the southern half of the lake; in fact, it enjoys a climate natural to the elevation, which is here further

tempered by the proximity of high mountains and lofty cold plateaux. Of all these more salubrious and richer northern districts, that immediately about Ujiji is unquestionably the worst, while Ujiji itself is an unhealthy place, and nothing can be done to improve it much. Is is situated among coast swamps

Fergusson follows game and drinks.

and river deltas, which the fall in the lake has rendered more undesirable than they were. A great deal of the wind at Ujiji comes from the south and east, so that one gets the full benefit of the steaming swamps at the mouth of the Malagarassi river, some thirty miles to the south; and last, but not least, the whole place is saturated with the accumulated filth of centuries of Arab occupation. In this connection a

grim relic of the past is to be seen beyond the old coast-line, where in Ujiji's palmy days the slave dhows used to anchor close to the town. This anchorage has now become dry grass land; but it is everywhere covered with human bones, little heaps of skulls and other odds and ends protruding in all directions above the sand.

In accordance with the arrangements which I have already described, we made a flying visit from Ujiji to the north end of the lake, and it took us about twenty-four hours' steaming to reach Usambura, the lake becoming narrower and narrower all the way. Close to the north end it is flanked by a towering range on the west, which extends far beyond the northern shore, and runs parallel to the somewhat lower eastern ranges; and thus the great valley of Tanganyika is seen to continue northward long after the lake itself has come to an end. As we neared the northern shore of the lake, the German camp became visible at its eastern corner, and on landing we found a sergeant with three fine Muscat donkeys ready to take us up to the camp. Here we found Captain Bethe, the official head of the whole German Tanganyika district. He was a most charming and interesting host, for he had been the first European to explore among some of the lofty Mfumbiro mountains between Kivu and the Albert Edward Nyanza, and he was consequently full of information about some of the very districts which we wished shortly to examine. He told us that the Congo rebels had been in the neighbourhood, and had sent to him asking him to give up the fort. He had some Sudanese soldiers with him, not a large number,

and I therefore asked him what he had told them. He said, "I replied, that if they intended to attack me they might; that I was a soldier, and fighting was my trade; and I did say to them, therefore, 'Koom.'" They had not "koom," however, and much to our surprise we also found Captain Haec, the Belgian Commandant at Usambura; he had encountered the rebel soldiers west of the Rusisi river, and had totally defeated them, killing several hundreds and entirely dispersing the rest. He had then pushed over the mountains to Usambura and joined Captain Bethe, where we found him almost dancing with delight. He showed a most kindly interest in our expedition, and promised us all the assistance that the Congo troops and their outposts could afford us. He left the same afternoon on his way home to Europe, going across the north end of Tanganyika in a small dhow, in which I heard afterwards he had a very rough time. After Captain Haec's departure we explored Usambura and its neighbourhood with Captain Bethe. From my experience of the more southern countries of Central Africa we seemed here to be in a new world; this was the sort of country described by Livingstone and Stanley, by Burton and Speke, by Stuhlmann and Lugard. The village itself lay on the slopes of some huge and bare grassy mountains. There were extensive banana plantations, and much grain and vegetables were also grown. The soil was deep and rich and red, and there were also herds of the same big-horned cattle that flourish in Ujiji. But the most remarkable industry of the place was constituted by the wholesale capture of small fishes during the night. If it is calm, no sooner has the sun set than from the creeks,

from the reeds, from the small river mouths, and from all manner of other places, there emerge, as if by magic, literally hundreds of canoes, each carrying a flaring torch ot reeds, tied together into a long bundle. They then form up into one long line, stretching for two or three miles along the lake, the flare of their torches looking for all the world like the lights of Brighton or some other coast town, seen from the sea by night. In this way innumerable swarms of small fish are attracted to the boats and are caught with hand nets, each boat obtaining from a few pounds to half a hundredweight or more. In the morning all these fishes are brought up to the Usambura market, which is simply a long open space, at one end of which there is a huge thatched roof supported on open wooden pillars, under which the hundreds of buyers and sellers crowd, yelling at the top of their voices, should it rain, during the market hours, which are from six to ten a.m.

In this pleasant way then were our doubts and fears respecting our journey northward dissipated into air, and the sanguinary talk which we heard all the way up found to be, when actually on the spot, as I rather expected it would, merely a result of the surprising prevalence of those three African types, the lions, the locusts, and the liars, which inhabit at any rate the districts to the south. It only remained, therefore, for us to land the stores and goods we had brought in the steamer, and which Captain Bethe had kindly allowed us to leave in the fortified camp, and return for the rest.

After journeying once more down to the south of Tanganyika and back to Ujiji again with the rest of the

expedition, it was decided that I should remain behind there, while the loads and the steamer went on to the north end of the lake, for we had found that Bin-Sef-Rachid and Omari together had only raised seventy-five men while we were away, and it would be necessary to have a minimum of at least a hundred and sixty. At

Belts of euphorbia forest on the plains South of the Albert Edward Nyanza.

this time Baron Münchhausen was away on a small punitive expedition to the east, but during my enforced stay at Ujiji I was most hospitably entertained by the officer in command of the fort. I had nothing to do but to wait, and during this delay I explored the country round about. To the south of Ujiji there is a river which enters the lake by a broad swampy mouth some miles to

the north of the Malagarassi estuary. It swarms with duck and other waterfowl, and the Sunday after I had landed at Ujiji, the officer in charge went with me in a canoe to this river along the coast. We had not got far out among the low sand spits covered with reeds before the sea became unpleasantly rough, and we were finally forced to run the boat aground and walk the remainder of the distance round the shore. These long flat sandy coasts are peculiarly characteristic of Tanganyika, and possess an individuality of their own. The great white surf of the lake breaks landward over miles of yellow sunlit sand, while rising gently further in are the low bluffs and sand dunes covered with vivid green reeds and bushes, and straggling masses of blue and purple convolvuli. Behind all this bright fringe to seaward there lie the dark mountainous borders of the lake, which rise dimmer and dimmer as they recede into blue heights that attain at last some seven or eight thousand feet. The wind when it blows off the lake is deliciously cool and fresh, while over all there hangs a serene summer sky with its changing cloud shapes, that now gather round the mountain tops, now float in the most delicate masses of soft grey and white across the lake. The river we were looking for comes out as a rapid, shallow, coffee-coloured stream, leaping into and discolouring the Tanganyika surf between low sandy banks. Near its mouth there is a small village, where we got another canoe and paddled up. Not far inland the stream splits up into several channels of clear limpid water, which open out into a wilderness of bright lakes and pools, surrounded by dark foliaged trees and bushes, and covered with endless beds of pale purple water-lilies. Among these there are many flocks of duck, and here and there a native appears gingerly pushing

about in a tiny shell of a canoe, after the fish, chiefly Siluroids. They catch these by means of a line and a hook baited with small Tanganyika fish. Each line is attached to one end of a long bamboo, which is driven into the mud, and carries above the water a large and conspicuous knob of white wood. By this means the men, after

Euphorbia forests South of the Albert Edward Nyanza.

they have set from twenty to thirty, can return to the cooler shade of the trees, where they sit discussing the affairs of the universe together, in low voices, and especially the meaning of the intrusion of the white men into these undisturbed native haunts. They rest thus until a capture is proclaimed by the bobbing of one or more of

the wooden heads, when they rush yelling into the water as if their very lives depended on the result.

On the 17th of November Omari announced to me that ninety-one men had been collected, and these were accordingly paraded outside the Arab Bin-Sef's house. I went down to superintend the arrangements for the despatch of these men overland to Usambura, and during the performance I sat with Bin-Sef on a stone seat outside his door, which had been covered with a brilliant red cloth for the occasion. Here we discussed the endless question of pay. It had been arranged that each man should receive ten rupees a month as long as he was with me. But there now cropped up the question of food or food money, which is distributed or paid by the week. Finally this was settled to be two yards, or half a rupee a week, or its equivalent in foods, or anything else which might be regarded as of similar value, there being in Central Africa no Truck Act; and when this had been arranged, the ninety-one worthies were bundled neck and crop into a great dark room inside the house, several Arabs, more or less armed, standing guard over the door. They were then let out one by one to receive a month's pay and a week's food money, and to have their names carefully taken down by myself and Bin-Sef, with the names of their tribe and that of the head-man to whom they belonged. This is done, so that if they run away, as some of them are sure to do a few days after they have got their advance pay, they can be found when they return to their villages later, after having had what has been well described as an "unholy Belshassar" for a week or so. I had arranged to buy the cloth for this advance of pay from Bin-Sef, and it had appeared after much talk, in as many languages, a few days before, that I was simply to buy the

cloth and hand it out to the men, but I found that no such simple method was going to be adopted. Bin-Sef produced a stick, which looked about six feet long and was tipped with brass. This he said was his measure, and if he measured the cloth out with it to the men, he would make the profit which he required after ostensibly selling it to me at a lower rate. The cloth was done up in bundles of thirty-two yards, which were said to be sold to me at twelve rupees a bundle, but after measuring it out with his stick Bin-Sef scored two rupees a bundle, at least that was how it worked out experimentally, for I tried, and I thought it might be as well not to enquire too closely as to who lost the said rupees, as the men seemed satisfied; we therefore went to work with the stick. But after we had paid about four men a great lamentation arose in the dark room within; the stick and the cloth were thrown down on the ground, and the Arabs rushed off in their clattering sandals, their shrill high-pitched Swahili adding to a din, the like of which I have seldom heard. It now appeared that some genius ruminating in the hot dark inside had come to the conclusion that it might rain on the way north, and that he and his fellow porters should be provided with four yards of cloth each, to make small tents. Bin-Sef thought it might be as well to submit, but I fancy his advice was tempered by the fact that he was selling me the cloth, and giving it out to the men with his stick. However, we finally arranged to give them this gratuity, as I was anxious to appear as well as possible to the men, at any rate before we set off. The men were all then paid off, and Bin-Sef introduced me to an individual called Taratibo, who could speak a few words of English, and who Bin-Sef said was among the list of porters, but who would take the men up to Usambura while I waited

at Ujiji to see what more men could be got. He also said that Taratibo was to receive as head-man fifteen rupees instead of ten. Next day the men were again paraded, this time in front of the fort, and after some words of warning from the officer in charge, they filed away to the north, with their women, their goats, their cloth, their pipes, and the long native mats in which they slept.

Omari loading the native punts at Vichumbi, at the extreme South of the Albert Edward Nyanza.

CHAPTER X.

> "To unpathed waters, undreamed shores; most certain
> To miseries enough."
>
> —*Winter's Tale.*

AFTER about twelve days more at Ujiji I succeeded in raising some sixty odd additional porters, and as both the Germans and the Arabs now assured me that there was no immediate prospect of obtaining any more, I left with this force and marched directly overland to Usambura, which I reached after eleven days' journeying through the wild and mountainous country which borders Tanganyika to the east. Having reached Usambura and joined the rest of the expedition, we were now, with the exception of the fact that we were somewhat undermanned, both ready and able to continue our journey into the unknown northern districts: that is, into the country which, in one sense, was the goal of the whole expedition, and over the arrangements for the exploration of which the Tanganyika committee had taken so much trouble at home, and on account of which I had spent so many anxious hours on the way up, through the rumours which we had heard all the way of the difficulties which awaited us as soon as we left the more beaten tracks for the north. From Usambura, which we left on the 30th of November, 1899, the track to the north leads first along the lake shore through innumerable enclosures and villages

surrounded by banana plantations, so extensive and so well kept near the lake shore, that they reminded one of portions of the coast of Sicily. As I plodded along over the soft sand and the beautiful convolvuli which straggled over it, I had much to think about; much that was pleasant, much that was the reverse. We were leaving at last for the mysterious north with our hundred and odd stalwarts, with Omari-bin-Omari, Omari Kidogo and the poor Nyassa cook. There was the fine gentleman Aden, and a young savage that Fergusson had picked up to make into a servant, but who was as yet crude native brass, so much a real naked savage indeed that it frightened one to look at him. There was the mild and gentle and confiding Taratibo, whom Bin-Sef-Rachid had given us for a consideration, and with this howling, laughing, gibbering crowd we were off, leaving behind us the last links which permanently connect the outer world with the ancient barbarism that still lingers in the vast interior. We were moving off to Kivu, and on into a region that was unmapped and unknown, but of which some tale had been told of wars and rumours of wars, of plague, pestilence, and famine, of battle, murder, and of sudden death. We were close to the unmapped Rusisi river with its five mouths, and at a place called Kajagga we turned abruptly to the north. From this point for the next two or three days we travelled over flat plains, which had obviously at one time formed the bottom of Tanganyika itself, for the plains are of sand and mud, and are covered with the dead shells of molluscs similar to those now living in the lake. After a few miles this sand gave place to calcareous mud, which was also obviously part of an old lake deposit. The plains which it formed were very characteristic of the place, being covered with short grass

and studded in all directions with gigantic euphorbias. The plains themselves were bounded to the left and right by the blue ranges of lofty mountains which form the opposing walls of the great valley in which Tanganyika lies to the southward. As we went further on during our march from Usambura, the calcareous mud began to be

Albert Edward punts—another view.

pierced in places by a much harder, older-looking material, which had weathered through it, and I noticed that the natives had used fragments of this stone to build up shelters for their fires, when cooking their food. In one of these chalky-looking stones I was suddenly struck with the appearance of fossils, and on closer examination they turned out to be the remains of old Tanganyika shells.

Not far from this place there was a steep dry cañon worn out by the repeated storm torrents which had swept down it from the hills into the Rusisi; and in the cuttings in its sides, I was able to examine the old fossiliferous deposit *in situ.* It was a considerable depth, sixty feet or more being exposed above the ground, and here and there it contained layers of fossil shells. We can be sure therefore that Tanganyika did long ago extend as a deep lake at least twenty miles north of its present boundary. Beyond this point matters are, however, not so simple; the valley has become inundated with much loose gravel and sand brought down by the Rusisi and its tributaries, and after this point to the northward matters are quite different. Here the Rusisi river, instead of lying in the midst of an alluvial plain, cuts through a succession of rocky gorges in such a manner that at one place the river is completely arched over with rock. Shortly after leaving the camp at Butagata the flat alluvial plain gives place to high ridges of irruptive rocks, which cross the great valley from south-west to north-east, completely shutting off the lower flats from the rough ground which here forms the floor of the depression. There is no trace of old sedimentary deposits on this higher undulating ground, and the route to the north now rose rapidly; in fact, after the next camp we reached a height of about six thousand feet, the dwarfed remains of the great valley of Tanganyika, which still ploughs its way on to the north, lying somewhat to the west. Next day we rose again, passing over delightful rounded grassy hills, over which we expected to come in sight of Kivu every hour. But it was not until the afternoon that, on a summit near a village, we came in sight of a long streak of silvery water lying far below us in a great trough. At the south-east

corner of this sheet of water, which passed out of sight behind some rising ground to the north, a river found its way out to the south between the hills, rushing in a white lacework of foam through a rocky gorge, and with a roar that made itself distinctly heard although we were at least four miles away. The beautiful expanse of water

Crossing deep water in an Albert Edward punt.

was Lake Kivu, and the river was the Rusisi at its source. The scene from where we stood was beautiful and lonely in the extreme. All the country near at hand lay flooded with yellow sunshine, the great down-like hills were covered with bright green grass, and in the steep valleys between them there were patches of forest which were almost black. The lake itself was a pale silvery blue, and on the other side the mountains rose again in every

shade of pink and purple, until they culminated to the north in a dark jagged mountain range.

Towards evening we reached an old German camp on a steep grassy hill near the roaring outlet of the lake. There was a Sudanese sergeant and a few men of Captain Bethe's also here; they told me that Captain Bethe had journeyed to Kivu during the time we were away to the south of Tanganyika, that he was camped immediately to the north, and I therefore went to see him on the following day. It was not a pleasant march; the ground about this place is extraordinarily slippery when it rains, and the natives have, among their other detestable habits, that of fencing in the permanent paths with tall quick-set hedges of grass, euphorbia, and screw pines, so that the lane of mud, about one foot wide between them, is, and remains throughout the day, the wettest part of the country. We floundered for miles in mud, and then came out on to streams, which were ice-cold and difficult to cross. I tried to ride my donkey, but the poor brute stumbled worse than I did; however, about one o'clock I once more came in sight of Kivu, at a point where it broadened out among innumerable grassy islands, and some way below us near the water lay the German camp. Captain Bethe informed me that he was not at all sure about the state of the country further north, and with his characteristic kindness he gave me an escort of a Sudanese sergeant and some of his own Sudanese troops, who were to act under my orders and accompany us as far as the outposts of Uganda. I then returned to Fergusson, threading my way this time along the lake in two canoes. This return journey was the first opportunity I had had of examining Lake Kivu at close quarters. In this part it is beset literally with hundreds of islands, which are of all shapes

and sizes, from mere reefs to rounded masses of grassy land two or three square miles in extent. They almost all have a more or less steeply-curved sugar-loaf form, their slopes falling precipitously into the thick green waters of the lake. The water's edge is generally fringed with bushes and tall reeds, which grow thickly together, and

Crossing the Albert Edward Nyanza to the West Coast.

the land rises so steeply into the grass slopes behind that it is exceedingly difficult to get on shore at all from a boat. In consequence of this peculiar character of the shores there are hardly any places where there are sand beaches or rocks, and it was only after I had been paddling about for an hour, and scanning the innumerable islands with my glasses, that I saw a low rocky shore on the left, on which I landed. It

was a most extraordinary place, backed up by a steep green hill. The rocks which I had seen consisted of strange rounded masses like the surface of a pudding, and, wherever they were wet by the ripples of the lake, were covered with green *cladophera* and slime, and in places they rose up into weird stony trunks, like those on the old coral beaches one sees about Mozambique. These up-standing lumps were, moreover, pierced with holes, as if they had been prepared for blasting operations, and for the life of me I could not find out for a long time what they were, or how they had been formed. When I broke off a portion, moreover, I found to my intense surprise that the stone was full of fossil shells ; there was an unmistakable *planorbis* and some conical forms, probably *melanias*. But what animal had bored the long straight holes about an inch in diameter which ran parallely through the mass? I could not make this out, but after a time I found one mass with an old partially fossilized reed stem filling up one of the holes, and then the mystery was suddenly solved. The holes were the casts, in a lake deposit of some kind, of reeds that had once grown there. That this was so soon became certain, for I found several clumps of old dead reed stems already becoming covered up with a curious incrustation from the waters of the lake which forms about them, and other similar structures. In other places this substance, which turns out to have a high percentage of carbonate of magnesium, binds the loose pebbles of the shore into masses of conglomerate, which are as hard as if they had been made of Roman cement.

Rain descended in torrents as we passed among the islands ; we lost our way among the channels two or three times, and it was so bitterly cold that I was very glad when we reached the steep hill by the Rusisi river about

two o'clock, where I had left the camp. The same evening a great misfortune befel us. It was just after dinner, and I was smoking with Fergusson, when Omari came up hurriedly and said that eleven men had run away while we were at dinner. We went back with him into the men's camp, and there, sure enough, were the empty

In Mid Ocean.

tents denuded of their mats and smaller fittings, and the men were gone. I immediately sent off to the local chief, who was a weird old bird with a long pipe, telling him to tell his people to catch or kill any men of mine that he found in that district, but it was all in vain ; as a matter of fact, the business was far worse than we had at first anticipated, for when the men were called over the

missing eleven swelled out to nineteen instead. Enquiry showed the cause of the thing to have been a typically native one. The men who had bolted slept near a hut in the village where there was a woman who lived with her husband, but who fancied another man better. This man had gone some months before on another expedition. Other natives coming back to this village told how this man was dead, whereupon, her husband being out fishing, the lady lifted up her voice and howled, and some of my porters enquiring what was the matter, learned that a man was said to have died on an expedition going north with a white man like us. Whereupon these fools reasoned among themselves that as he had died, so would they also all die, and they had fled in a body, to be almost certainly killed by the surrounding tribes, and even if they did escape, to be certainly seized by the Germans and put in chains for six months, whenever they got back to their own villages about Ujiji. The position as regards men was getting serious. I had lost six between Ujiji and Usambura, eight between Usambura and Kivu, and here again nineteen, making a total of thirty-three desertions. We had been short of men before the last lot disappeared, and now we were so much worse off. It was therefore with some anxiety as to the future that I left this, our first camp on Kivu, going round to Ishangi by boat, the rest of the expedition marching with as many loads as I could not take.

CHAPTER XI.

> " There's a king on every dung-heap,
> There's princes not a few,
> There's a whole raft-load of potentates,
> On the road to Timbuctoo."

AT Ishangi I made the best arrangements I could about engaging further men from the local chiefs; we also hired three canoes from a local potentate, and set out for the north of Kivu, where the loads and men were to be left, at a place called Ugoyi, and I and Fergusson with a small party were to continue to circumnavigate the lake, returning to Ishangi, and then back again up to Ugoyi, where we could resume our journey to the north. When we started on this stage it was arranged that we should go by boat with as many loads as we could carry, while the rest, with the head-men, the cattle, and the guard, should march, both parties arranging where to meet each day and camp; but through unforeseen circumstances this plan, as many others, had to be abandoned.

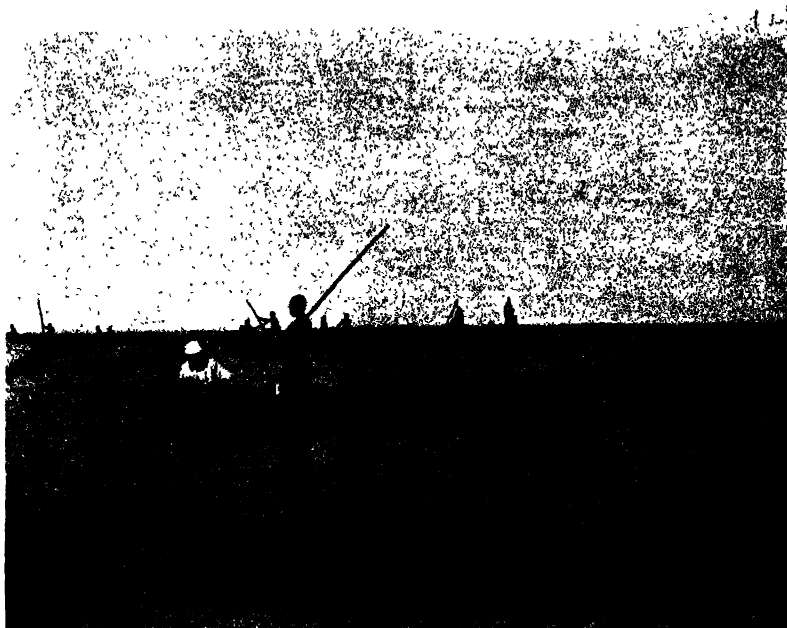
When we left Ishangi we had three canoes with us, two big ones and a small one; they were dug-outs with long snouts. Fergusson and I got into the biggest, which was already well loaded, and set out. She rolled in an ominous manner when anyone moved, and, as I had had some experience of these craft on my

former expedition, I was unhappy from the start. The natives themselves never load their canoes to any extent; they are round-bottomed, have no ballast, and if heavily laden turn bodily over from the slightest cause. Shortly after we started a wild downpour of rain came on, and a heavy blow followed from the north-east. We took shelter in some reeds and rocks. After it was over we set out again and passed round a headland between the island of Quichwi and the general coast into the main body of the lake; here we met also the north-easterly swell. The canoe did not rise at all well, and the waves slipping along the sides began to slip in also. We tried to get back as we were, but it was obvious that she was going to fill up before we could turn the clumsy craft, so we tried to run her on to the head itself. As we neared the steep rocky shore two or three waves almost capsized the boat, and if four or five men had not jumped out, and by swimming managed to get her end on to the surf, we should have lost almost everything in the way of guns, tents, and camp gear that we had. Finally, however, we managed to get near enough to the rocks to jump, and thus lightened she was turned, and got back round the point. When we ourselves had scrambled across the rocks, we found that the other boats had prudently not ventured out; their occupants were quietly smoking their long pipes and watching to see how we had fared.

As the sea showed no signs of going down I resorted to a plan I had often adopted on Tanganyika, namely, that of lashing two canoes together, so as to form a sort of catamaran. This operation, although it makes them slower, and although they may still fill and

sink, prevents them from rolling bodily over, which is always the great danger with dug-out craft.

In this fashion we set out once more, and getting clear of the cape came upon what appeared to be a boundless sea to the north, with the picturesque



Landing on the West Coast of the Lake.

mountains of Quichwi to the left, and the more distant headlands of the east coast far away to the right.

As we struck out eastward, the cape we were rounding rose into a high frowning headland of rocks and grass, and finally we passed a great arm of the lake opening up to the south again, several miles in length. The men said that the rest of the expedition would be at a distant point they indicated on the

opposite coast, and they wanted to cut across to it. As it was growing towards evening we did, but if there is anything I detest, both in principle and in practice, it is crossing a wide African water in dug-outs. In the first place there is always a very fair chance that you will be drowned, like the ill-fated members of the Lemaire expedition on Tanganyika, and a good many more; or if not actually finished, you may have to sit for two days, as Captain Long did, astride your own capsized canoe, without a hat, and all your effects gone to glory. No man on earth, either native or European, can tell whether it will blow within the next hour or not; the lake may lie like oil from sunrise to sunset, or it may look just the same, till without the slightest warning it becomes flecked with catspaws, which spread and spread until the wind blows a strong, steady breeze and the ripples have risen into great slapping waves, which spout in white surf along the coasts, and among which any canoe a native ever built will founder in five minutes. I don't know how Fergusson felt, but I went across that six or seven miles of open water in terror of my life. Our guides lost their way, as usual, when we neared the eastern shore of the lake just after dark, and it was not until after beating about in a dusky wilderness of creeks and bays for two or three hours that we saw the camp fires at last on a piece of rising ground.

The east coast of Kivu is extremely beautiful, and I have a vivid recollection of the brilliant moonlight which settled over it as we smoked our pipes in this particular camp till bedtime. The nearer islands were wrapped in the deepest purple gloom, and stood out in the most intense contrast from the pale silvery

blue of the lake which wound between them. To add to all this, Quichwi and the more distant land masses had taken on an exquisite shadowy moonlight pink, which I have only seen in the tropics, and not often there, while above them the vast dark sky with its flaming stars had the same keen clearness, the same

The pebble beaches of the West Coast of the Albert Edward Nyanza and old water marks.

glittering intensity, one sometimes sees during a long hard frost at home.

As we moved away next morning, an old native clad in a piece of string and a very scanty apron of bark cloth, which he wore behind, emerged from a dilapidated village on the road. He volunteered to be our guide towards the boats, and all the way kept lifting up his

scanty garment and slapping himself behind, explaining in a strange dialect, which very few of my men understood, that he was very naked indeed and wanted cloth. I told him we would give him some when we reached the boats, but they were already loaded up, and I therefore told the old man to get in and come with us, and that when we reached the next camping ground I would give him some gaudy cloth or other, so that he might clothe himself withal. I thought no more about him till we reached camp in the afternoon, joining the rest of the expedition on an elevated cape. Here, however, the old man turned up again, and slapped himself with vigour to show that he was still unclothed. I was sitting on a box, and there was a great confusion of men going and coming during the formation of our camp. I had given orders that none of the porters were to go out of camp without a head-man or a soldier with them ; and the sergeant had just told me that several had gone, nevertheless, to buy food, etc., in the native villages, and I therefore did not attend to the old man at the time. We were determined to put a stop to this habit the men had of going away in groups by themselves, ostensibly to buy food ; for once out of range of the Sudanese rifles, they bullied the natives and created general ill-feeling, and there was no telling whether for some reason or other some of them might not try to bolt, and if this happened again the whole expedition might be brought to utter wreck shortly.

We were now in a country full of Sultans, and a strange tall people who were by no means black. In fact, the Sultans themselves, who abounded like the grass and the flowers, were almost as light coloured as Indians, tall and thin, with thick bushy hair and delicate aquiline features. These people were reputed thieves and cut-

throats, and I had been explicitly warned by everyone who knew them not to let my men wander about, and to deal in an arbitrary manner with any of the Sultans whose men should make trouble. I therefore sent Omari and Omari Kidogo to follow up and bring in all the men who were out of camp. I also sent to the local Sultan, who lived in a valley not far off, and asked him and his brother to catch any of the men belonging to us who might be found wandering at large. In about an hour all the men who were away without leave were brought back again; they were severely talked to, and I warned them that the head-men and the soldiers of the guard had my explicit orders to shoot anyone who might venture out of the camp at any time without being accompanied by a representative head-man, on any pretext whatever; and from that time onward a better tone prevailed throughout the camp.

It was now about 3.30 in the afternoon, and we were getting very hungry, but on going to enquire why food had not been cooked, I became aware of a wild and confused hubbub arising from the direction of the Nyassa cook. Aden was bawling at the cook, and the cook, who appeared to have got his shirt very much out indeed, was bawling back at Aden; Omari and Taratibu were also joining lustily in the din, and Fergusson's boy Risasi had protruded his lips into the gigantic pout that he always assumed when anything went wrong. It appeared that the cook could not find one of the loads that contained our canteen, *i.e.*, all our spoons, forks, and knives, all our plates, pots, and dishes, everything, in fact, with which we cooked and ate, teacups, tumblers, etc. The camp therefore was again turned upside down, but the canteen could not be found. It was a most serious loss, as it reduced us to eating out of half a plate and a pan lid

and two brass cups belonging to the Sudanese. I had never realized before how really helpless a European is without knives and forks. I had not the native gift of tearing a fowl to pieces with my teeth, or of using a hunting knife with one hand to lop off pieces of goat, the other end of which was held in one's mouth. After feeding in this way we held a consultation, and the general consensus of opinion was, that one of the natives who had brought us presents of bananas and grain had bolted with the load during the confusion of pitching camp, for, as I have said, these people are notorious thieves. The Sudanese sergeant and Omari both thought this, and advised us that we should send for the Sultan; this was done, and as soon as he came, which he did in about half an hour, he was quietly surrounded by the Sudanese, who informed him politely that he would be obliged to sit on where he was till his people brought back our missing load. There was a fearful hubbub, and the news that we had captured their precious Sultan was shouted all round from hill to hill. As it grew dark there was evidently a great gathering of the clans in the neighbouring valleys, but they were afraid to come near, or to make any attempt upon the camp. The Sultan and his brother sat on the ground by the fire, discussing matters with the guard. In the intervals of talking they both smoked long pipes solidly, and the Sultan said he could eat no food except that which his wife made, and as we had come making "bad words and trouble in the country" this prudent lady had betaken herself to the hills, to be out of harm's way; and so he sat on without supper throughout the clear moonlight night, alternately smoking in silence, and then expostulating with the guard. I woke next morning just as it was coming daylight, and before I had got out of bed Omari put his

head into my tent and said the canteen had not turned up, but he also said that it had occurred to him that the old native who was so desperately naked and who wanted cloth had gone away without getting any, which he would not have done unless he had secured something in its place. I therefore sent one of the Sudanese back to the

The Lake shore.

village from which he had come in a canoe, and late in the afternoon the soldier and the canoe re-appeared round a promontory to the south. As the boat drew near the soldier fired his rifle, and we gathered from this that the missing canteen had been found. Such was indeed the case. It appeared that he had gone quickly to the old man's hut, and had there surprised him in the very act of

unpacking his prize. He had caught him, tied him up, and got the local chief to bundle him off to Captain Bethe, to do unto him what he thought fit.

I had now, therefore, to make amends to the unfortunate Sultan, who had sat all this time on the ground, with no consolation but his long black pipe. I went to him, therefore, and I had him informed that I had made a mistake, that it was not one of his people who had stolen our canteen, although we knew that his people were notorious thieves, to which latter remark he assented. I told him that we had recovered it, and that I should now give him a large present of cloth and beads, with which he seemed immensely pleased. There was a sort of general thanksgiving, a huge uproar of general satisfaction, concluding with the arrival of strings of goats, fowls, and bananas, for sale in camp.

We now decided not to attempt to keep the boats and the rest of the expedition together, but that Fergusson and I should go right up to the north end of Kivu in the boats, while the rest followed at their leisure overland.

From this point onward we found the coast of Kivu, as will be seen in the map, exceedingly indentated, innumerable fjord-like bays opening up amongst steep green hills, while the coast was fringed with numberless islands, often covered with patches of virgin forest.

All the way I was continually looking to the north, for I expected that at any time we might come in sight of the great Mfumbiro mountains, which rise immediately to the north of the lake; but for some reason or other connected with the atmospheric conditions, it was not till we reached a point only one day's journey from the north shore of Kivu that we saw anything of them. Here we were looking for a place on which to pitch our tents,

along a point that ran out from the eastern shore. There was some flat ground on the top of it, and on passing through some trees to obtain a view up the lake, there appeared to the north three huge mountain peaks, each rising with that delicate upward curve which one always finds characteristic of volcanic cones throughout the world.

Punters resting and drinking under the great slopes West of the Lake.

The one to the east was evidently the highest. Its summit was wrapped in a thin veil of white mist, while that to the west was abruptly truncated, and from its crest there drifted a long trailing cloud of smoke and steam; the intermediate cone had a wild, pointed and asymmetrical crest, which reminded one of the almost perpendicular

central peak of Kenia. These three strange solitary peaks were evidently still very far away, perhaps seventy miles from where we stood. The evening, however, was at the time singularly cool and clear, and through their huge height they soared up in the keenest profile above the lower haze and mist. As the sun set they gradually faded away and disappeared, and next morning, although the sky seemed clearer than ever, they were quite invisible.

Late next day, after rounding a huge mass of mountains which stood out from the east, we reached the northern shores of the lake. Unlike that of most other portions of Kivu, the coast here is composed of sand, while but a few miles to the west it is formed almost entirely of the rough, more or less recent lava, which has descended directly from the great cone of Kirungu Cha Gungo into the lake. The slope of this huge volcano, which we could now see rising dimly beyond the nearer forest and topped by a vast pine-tree-like cloud of smoke and steam, begins really on the shores of the lake itself, and all the gradually rising forest-clad lava fields are studded with secondary cones.

After two more days we again started, this time west, along the north shore of the lake, passing endless promontories, formed by old lava streams, which have now become sufficiently disintegrated on the surface to be covered with brilliant green grass and picturesque clumps of euphorbia trees.

Along the north shore, about half-way between the east and west coasts of the lake, there is a very large secondary cone, the steep sides of which slope abruptly at a very high pitch into the water, and form the shore for two or three miles. Round the base of this cone the water is deep, and the rock rises so steep and smooth that it would be quite impossible for a swimmer to climb out on to the

precipitous hill-side, and it was just off this particular place, of course, that we had another nasty experience with the canoes. There was a fresh breeze blowing, and as we passed the steep rock face the reflection of the waves from it caused them to hop up into a nasty choppy sea, which splashed into the heavily-laden dug-outs, from end to end, and we all but sank ; but we were able at last to get them into the base of a small gulley on the face of the cone.

Before reaching the actual west coast of the lake there is seen to be an opening into a curious extension of the water to the north, which is correctly represented in Count Götzen's map, and into which one enters by an imposing narrow gateway, formed by a perpendicular volcanic cliff on the one side, and the steep green slopes of the western coast on the other. These slopes are, of course, the western side of the great valley, and are formed of the old irruptive rocks, characteristic of them throughout its length. I obtained photographs of this curious channel, and we finally camped, after a long search for a patch of ground on the west coast anywhere, which was not absolutely too steep on which to pitch a tent.

CHAPTER XII.

"Butchers and villains! Bloody cannibals!"
—*King Henry VI.*

"Hark, 'tis a rushing wind that sweeps earth and ocean."
—SHELLEY.

THE western shore of Lake Kivu, which we had now reached at the north end, is in all respects a continuation of the same series of mountain scarps, composed of various irruptive granitoid rocks which we have seen extending without interruption in a line stretching all the way to Tanganyika, and then on to the extreme south of Nyassa and even beyond that lake. Our journey south, under these frowning, partially grassy, partially forest-clad heights of Kivu, would have been without incident, had not one of the canoes been smashed by a sudden storm which arose from the east during the night. Through this loss we were obliged to interview the native Sultans, and obtained another boat from them for a price. This transaction led, however, in the end to much trouble, as will be seen. We reached the village of the principal Sultan, half-way down on the west coast of the lake, and after leaving this place we crossed to the island of Qwichwi, a four and a half hours' open crossing. Qwichwi is really one of the main features of Kivu; it is an immense mountainous island mass, as big as the Isle of Wight, covered with forest and plantations,

and thickly inhabited. On reaching the island we noticed that we had been followed by a large canoe, which came up with us on the coast of the island. The native paddlers passed our men the time of day, gave a huge guffaw, asked us where we were going, and sold us a couple of fowls. We reached Ishangi two days later,

The steep West Coast of the Albert Edward Nyanza. The Western side of the Great Central Valley of the Lakes.

having thus completely circumnavigated the lake, and we were now ready to start finally for the north.

On the following morning, however, after the men had been called over, and the loads had been carried down to the boats, we found that both the big canoes, the one which we had obtained from the chief on the west coast of the lake and the one Captain Bethe had lent me, were missing. It was evident what had happened; the

men in the large canoe which had followed us had waited till dark and a convenient time, and had then come in, under the German camp—right under the German sentries, in fact—and stolen not only the canoe which we had got from the west coast, but, native-like, Captain Bethe's also. After investigating this wretched business Captain Bethe, Fergusson, and I returned sorrowfully to breakfast. We drank our last bottle of lager beer, and Captain Bethe finally lent me his two remaining canoes, which were still lying near Ishangi. He also detached four more of his Sudanese troopers, with a sergeant. These men were to accompany me up the west coast again, and either recover the stolen canoes or make reprisals. We left the same afternoon, and reached the villages on the west coast again, where we could neither hear nor see any trace of the stolen boats. The natives themselves thought that they might be at a village which we had stayed at on the way down, near the island shown on the map, and which island is about a hundred yards from the coast. It was important that if the canoes were there we should come into this village before daybreak. We travelled all night, nodding in our long chairs, which could be easily placed in the bottom of the big dug-out boats, the regular splash of the paddles and the dim forms of the huge headlands on the west being the only features which broke the monotony of the vast watery waste over which we moved. We paddled on in this way all night and reached the southern coast of the island just as the dawn broke among the stars away to the east, and showed up the forest on the nearer coast, with its white encrusted pebbles and dark trees. There is something wonderfully simple about an equatorial dawn. It is night, profound

night, with her thousand stars. There are the strange night smells abroad, the scent of dewy trees and nocturnal flowers. The dark holds all, except the jackals, the great cats, and unholy men, like ourselves, who are creeping about unseen. And then all in a moment it is light; the old godless African world has come back again, though it stands at first somewhat indistinct

View on the West Coast of the Albert Edward Nyanza.

and sickly-looking, like something that has just been born. There were the white rocks and the gleaming water round the island, on which could be made out the indistinct forms of huts, with faint wreaths of smoke hanging about the bananas growing round them. We had, as we had intended to do, effected a complete surprise, but the canoes were not there. After breakfast, and having taken some re-determinations of longitude, we

set out again, determining to go straight to the village where we had hired the canoe on our way from the north. About two o'clock, however, while we were crossing a wide bay, a terrific gale sprang up with the utmost suddenness. The wind tore the sea furiously past us landward, and it was very fortunate that near the middle of this bay there was a small rocky island, on the lee side of which we took shelter. The island was about a quarter of an acre in extent, rocky, and covered with trees and grass. We landed our tents, loads, guns, sketching books, canvas chairs, and stores of all kinds; but while we were attempting to clear a place for the tents the wind gradually increased into a perfect hurricane, and at the same time the reflected waves from the steep coast facing us began to grow, threatening every minute to smash the canoes that were moored behind the rocks. To prevent this I put a man in each of them and let them drift out on long lines. These men sat then rolling about in the great seas, and were sea-sick; but we did not care much about that, so long as the canoes were not damaged. Later on, however, the wind chopped suddenly round and began to blow off the coast. One canoe, half full of loads and provisions, was immediately blown on the rocks. She fortunately filled at once and sank in about four feet of water, without being stove in. The others were then in the greatest danger for a time, but by dint of much language we managed, with the soldiers and the porters, to lift the other boats bodily out of the water on to the rocks, beyond the reach of the waves. We were then able to breathe freely once more. The sea on the outside of the island was really terrific, the spray

from the great waves flying over the rocks, fifty feet or more into the air.

In the morning, after a long night's rest, we awoke to find the lake again oily, with only the slightest trace of a long swell under its glassy surface that told of the fury of the day before.

We had hardly started, when we saw two large canoes

Hot and still.

on the horizon, coming south. They were very like the boats we had lost, and as they halted the moment they saw us we gave chase, one of our boats standing in towards the coast, the other standing out, so as to head them off and keep them from rounding a cape to the north. They instantly realized the intention of this manœuvre and tried to get away, running in towards the shore, and then in amongst some small headlands and bays. We paddled after them as quickly as we could, but not

being laden they were naturally quicker than we were, and got out of sight before we came up. One canoe, however, reappeared as we rounded some rocks, and this we followed up persistently until she was finally run aground and abandoned by her crew, near a small village. The other fugitive had evidently been pulled up among some trees or reeds somewhere, and could not be found. The sergeant and some of the soldiers then went in and brought off the stranded boat, and we pushed on as rapidly as possible to the village where we had hired the canoes, now not far off, our object being to secure the chief of the village and hold him until he should produce the other canoe. We came suddenly into his village and surprised both him and his brother there. There was the usual hubbub around in the steep grassy hills, but after a time the Sultan told his guards to inform us that if we would let him go he would produce the canoe in ten minutes. We were not such fools, and as he obviously knew all about the affair, we told him that unless he did produce it it might be worse for him. After prolonged shouting from the hill-tops, we learned that the missing canoe was said to be concealed somewhere among bananas in an adjoining bay, and it was arranged that a number of men were to go and fetch it, when the chief would be set at liberty. These men arranged with the chief to return with the boat at sunset.

The little bay in which the village lay concealed was not a nice place to stay in; the shore was low and green and damp, flanked by steep hills, on which the villagers' bananas flourished. Both the huts and the ground about them, the only ground to camp on, were dank and unsavoury, it was raining dismally, and it looked as though it meant to go on raining. There was a dead woman lying

unburied in one of the huts, and there were several other people ill in those round about. Later on the Sudanese sergeant obtained two canoes belonging to the captive chief, which were detained as hostages. But as time went on matters did not improve, and long after the sun had set behind the fringe of bananas crowning the hills to the west, our canoe had not been brought back, so we were forced to pitch the tents preparatory to spending the night where we were. The sergeant in charge of the Sudanese had explicit orders from Captain Bethe to secure the missing canoes if possible, and to demand that the men responsible for the theft should be given up and brought over to the German camp at Ishangi. If these demands were not immediately complied with, the sergeant had orders to destroy all the canoes in the village belonging to the recalcitrant chief, to make him prisoner, and to burn out his house in the village. At night the attitude of the people became threatening, and the soldiers fired into the dark, to frighten the natives from making any attempt on the camp itself.

As soon as it was light, we again inquired of the Sultan what he intended to do. He now said, whether truly or not I do not know, that he could not make his people bring the canoe, and that we had better let him go, so that he could look after the people himself. We therefore determined to have done with the whole thing as quickly as possible, as this sort of delay is useless and also endless. The soldiers therefore burnt out his house. We then repacked the canoes, and after smashing two or three others which were on the beach, we left with the chief for Ugoyi.

On arriving at Ugoyi, we found Omari and the rest of the caravan all safe, with the exception of one porter who

had died, and a donkey and her foal, both of which had died also; but the Ujiji cows and the calves had stood all the vicissitudes of the journey overland without winking.

Pelicans on a sand-spit on the North Coast of the Albert Edward Nyanza.

CHAPTER XIII.

> "In silence then they took their way
> Beneath the forest's solitude.
> It was a vast and antique wood
> Through which they took their way,
> And the grey shades of evening
> O'er that green wilderness did fling
> Still deeper solitude."
>
> —SHELLEY.

We had now been all round Lake Kivu and back again; we had got a number of salient points on its shores fixed by astronomical observations for the first time, as well as a large number of bearings between them. We had therefore acquired the material from which it would be possible to construct a tolerably good map of this remote and hitherto little-known African lake.

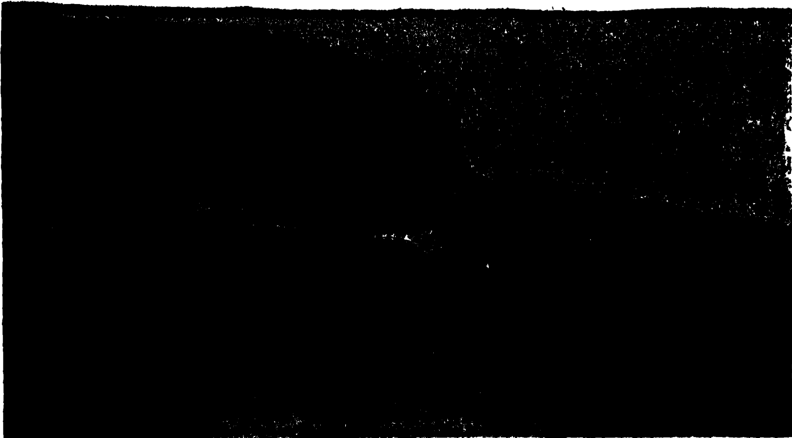
We had also become acquainted with the nature of that portion of the great central trough which stretches north from Tanganyika; we had found that Tanganyika had at some former time extended further north than it does now, but had never reached anywhere near Kivu; we had collected samples of the fauna in Lake Kivu, and had thereby shown that it had no community of nature with that of Tanganyika, and consequently we had shown it to be extremely probable that the jelly fishes and other marine organisms peculiar to the latter lake had not come into it from

Lake Kivu along the great trough from the north. We had seen also that this great trough did not end north of Kivu, but that its walls could be seen going on east and west of the great Mfumbiro mountains, and that these mountains had sprung up like a dam in the floor of it.

The source of the Semliki River.

It now remained for us to explore these mountains to a certain extent, so that we might form some conception of the nature of the great dam which they form to the north of the lake. Whatever may be the origin of the name Mfumbiro, which according to Captain Bethe is applied by the natives to a

district and not to the volcanoes at all, the name like that of Ruwenzori has been used by Stanley, Stuhlmann, and others, when speaking of the mountains of this range, when seen from various points by various people. These mountains are what everyone acquainted



View of the North of the Albert Edward Nyanza from Katwi (Fort George).

with African literature understands by the Mfumbiro Mountains, and it was these mountains, and these mountains only, which figured in the Anglo-German agreement. Mr. Grogan is therefore quite wrong when he goes out of his way to point out that the Mfumbiro Mountains only exist in the minds of English statesmen. As a matter of fact, he fell a somewhat easy

victim to a rather humorous German trick. The range was first closely examined by Count Götzen, who ascended to one portion of the rim of the great active cone. This capable German explorer used, as every competent geographer does, the native names which were applied by one or more of the tribes to the peaks in question, and these names are now all over the world in the literature of the subject, and have been ever since 1895, when he published an account of his journey, and the best map of this district which has ever been produced. It is therefore somewhat superfluous and misleading for Mr. Grogan to apply the names of his sisters and his cousins and his aunts to these peaks, as if he had discovered them in 1899. In fact, Mr. Grogan's account of this part of the country does not appear to throw any new light upon the admirable description given by Götzen five years before. The data in his map published in the Journal of the Royal Geographical Society, where it differs from that of Count Götzen, differs also equally from the observations made by Fergusson during the present expedition; for these observations entirely confirm and merely extend the observations made by Götzen himself.

From the north end of Kivu there are visible three principal volcanic cones; that to the west is the active Kirungu Cha Gungo, the two to the east are Sabiin and Karisimbi respectively. Of these three, the huge symmetrical peak of Karisimbi is undoubtedly the highest, and cannot be much less than 14,000 feet above the sea. The bigger of the two active cones, which was ascended by Götzen in 1894, was found by him to be 11,300 feet; and the second active cone,

described by Götzen as lying to the north of Kirungu Cha Gungo, is perhaps a thousand feet lower. As this cone was both described as active by Götzen, and entered on his map as such, it is hardly necessary to discuss Mr. Grogan's theory, based on native evidence, that it has sprung up since Götzen's visit.

Native Callers sitting in the sunlight at the gates of Fort George.

These mountains, perhaps the most interesting range in the whole African continent, are thus seen to be of huge dimensions, and they are unique in this, that they are the very largest active volcanoes so far from the sea in the whole world, and also that they are among the very largest and highest among the

active cones in the whole of the Old World. They are much bigger than Etna, and it is merely owing to the fact that they are still to a large extent unexplored, and that they lie in one of the most remote and inaccessible parts of the African Continent, that they have not long since taken rank among the wonders of the world. I therefore waited with some impatience on the northern shores of Lake Kivu for the preparations to be made for a start towards these unique volcanic peaks, which rose huge and cloud-spanned in the north.

It was, however, impossible to start for a couple of days. There were many things to do in the camp; porters to be doctored for various maladies, stores to be repacked, fishes that were in spirit and other preservative materials to be overhauled and made ready for a journey of unknown duration, round by the Mountains of the Moon and the Albert Nyanza to Mombassa, now so many hundreds of miles away from us on the east coast. I was, however, most anxious to get away, and after each of these two days was well nigh done, I walked and smoked on the shores of the lake, looking with feverish excitement at the vast blue shadowy mountains which rose up apparently so near to us over the forest, but which I knew in reality would not be reached for several days.

Late in the second night of our stay in Ugoyi a heavy storm of rain, wind, and lightning swept over the camp from the west, and in the morning the sergeant same to tell me that the recalcitrant Sultan and his retainers had seized the opportunity afforded by this nocturnal tumult to make good their escape. The old chief himself must have been a much more active man than

he looked, for he had cleared a palisade at least twenty feet high with the raw ends of the poles of which it was made, unbound and offering no foothold for some six feet from the top. All this, moreover, had been effected within ten feet of the sentry, who

Parading the men and loads at Fort George.

had, so it was said, simply moved under the shelter of the eave of a neighbouring hut during the storm.

Next morning we said adieu to the Sudanese sergeant who had lost his prisoner, and who was returning to Captain Bethe, and set out, in a deliciously cool sunrise, for fresh fields and pastures new. We were entering what at first sight appeared to be a very delightful country indeed, for as we struck away from the lake, we passed

through beautiful diversified scenery among great hills, the slopes of which were covered with brambles and bushes, among which there were hundreds of brilliant flowers and millions of bees. The whole region, in fact, seemed to be a sort of beatified edition of some untamed tract of country at home, only there was a bluer sky overhead and a warmer sun, and although it was not hot, there was not the faintest chill in the warm luxurious air. I walked in a coat and a cap and revelled in the surroundings, until we finally came in the afternoon to a village surrounded by acacias and acres of bananas, in which we camped. From this place the Sultan lent us guides, the chief of which was a handsome intelligent man, with a wonderfully active and distinguished manner. He wore the rough cloth we had given him over his shoulders in a most artistic fashion, and was in all ways, both now and afterwards, a shrewd and well-meaning individual. The Sultan's village, however, and especially the subsidiary villages round about it, were not so pleasing as the rest of the country had appeared. In a sort of hamlet on the crest of a green hill, buried in huge foliaged fig trees, there were several people in the last stages of starvation. They were crouched on the ground, mere listless bags of bones, and their hideous condition was made more apparent by the other natives who were about in the villages, well fed and active. In fact, there was as much contrast between the rich and the poor here as one sees without noticing it in a European city. Here, however, it struck one with a very unpleasant force. The starvelings were the people whose banana crops had failed, and, just as in Europe, the other villagers who were better off took no practical thought for them, but let them starve. I shall never forget the impression this difference among

the people made upon me at the time, especially when they were all gathered round their chief after he had come to see us. They were all quite friendly one with another, but some were actually starving where they stood, just as if they had been a crowd of rich and poor in some great European city. It struck one, however, in Central Africa,

The salt lake at Katwi. On the near shore are the mud rings in which natives allow the water to evaporate for salt.

for in these supposed seats of barbarism things of this sort do not usually happen, but the people hereabout in the country we were entering had many European attributes, and were among the very worst type of native, as we shall see.

When we have had an object in view for some time which we wish to attain, and which seems to be approaching attainment, as we had had the great volcanoes north

of Kivu, the inopportune obtrusion of hideous things, such as the miserable condition of these wretched people, awakens a kind of resentment, a feeling of animosity towards things in general, and a sort of impression that the whole drift of the universe with respect to human affairs is intentionally and designedly bad. I felt something of this sort here, but at the next camping ground, a lonely spot on the flanks of the great eastern mountains, it was destined to be brought back again, in another and a far worse form. We had come in all right after the day's march, and were in full view of the great cone of Kirungu Cha Gungo, which rose over an undulating plain stretching from our camping ground to its forest-clad base in the west. Our goal seemed, therefore, at our feet; the local chief had come in bringing presents, and seemed so friendly that I had allowed the men to go where they liked and buy food among the villages. All things continued in order until about nine o'clock, when our content was suddenly broken by Omari, who approached the tent with a long face. He told us that one of the porters named Melinda had not returned; he said he thought that something must have happened to him. I did not pay very much attention to the matter at the time, as I thought the man would probably turn up later, but next morning he was still missing, and we learned from his brother and from some of the friendly natives of the district that he had wandered off, like the fool of a nigger that he was, into another Sultan's territory, and had probably been killed. This at any rate was the explanation of his disappearance, which was offered to us by the friendly Sultan who had come into our camp the night before. It seemed impossible to overlook the matter and go on; in fact, the Sudanese sergeant almost

mutinied when I spoke of it; and as a matter of fact, had we done so, the news that the porters of our caravan could be robbed and murdered with impunity would have been shouted far and wide among the wild tribesmen who were watching us from the adjoining hills, and would

Lake Ruisamba and the Katwi plains.

certainly have led to further murders, and finally to a state of open war.

It was only on the word of the friendly chief that we had been led to believe that the man had been killed outside his own sphere of influence, and as all these people are notorious liars, my first action was to seize this chief and ten of his men, who were in camp, and have him informed that they would remain where they were for the present, so as to give us some sort of hold on the people about. The attitude of these same people was not nice;

they had collected in groups on the hills and points of vantage in the neighbourhood, with their short bows and spears and poisoned arrows ; in fact, while we talked there must have been three or four hundred of them, watching us from the sky line in different directions. I was by no means sure whether the story of our porter having been killed by the other chief, who had not paid us his respects, was true, and so in the afternoon I went with two Sudanese and Omari and several men to the village where our missing porter was said to have been last seen. The village was deserted, the inhabitants following us at a distance ; but later on we surprised a woman in a plantation, and she told us that a head-man of her tribe, called Kiburro-burro, had found our unfortunate porter in a village and had had him speared. She said she had seen it done in the village in which the man had been murdered the night before, before the chief's house. The people were still following afar off, and as they suddenly came closer when we entered the village, I gave the order to open fire, and they instantly fled. We then burned down the chief's house, and all the huts in the immediate enclosure, together with some grain stores, and went back into camp again.

Next day once more we set off towards the mountains. We made a wide detour to the north, for our guides whom the friendly chief had given us said that there was no water to be found on the low plains which stretched directly between us and the mountain slopes. We travelled all day over very broken and curious country composed of lava, which had at some time swept down from the great extinct cone of Karisimbi to the south. The ground was covered with bushes and grass, the path was hardly discernible, the sky was dark and lowering, and it rained heavily almost throughout the day. Near to us, and now

and then showing its gigantic form through the heavy rolling clouds, was the wild and jagged peak of Sabiin, while to our left in the west, the dark forest-clad slopes of the active Kirungu Cha Gungo swept up into the mist. After a long wet march, which passed finally through heavy

Afternoon tea on the road to Fort Jerry.

dripping forest, we came out on to a cold grassy slope and camped at a height of seven thousand feet. Near this camp to which our guides had led us there was an old tumble-down shed with a grass roof, which the natives had used for their cattle, and in which there was a solitary bull calf "however he came there," and nothing else. After the camp fires had been lighted, I placed our eighteen

guides whom the friendly chief had lent us in this shed, for he had expressly told us that, having received an advance of cloth, they would bolt on the first opportunity, and that at night they must be strictly guarded. He evidently knew his people well. As it drew towards sunset in this cheerless, wet, cold camp, the heavy clouds rolled off from the sodden sides of the great volcanoes, which were now quite close, and seemed almost to enclose us and as they majestically departed, we had a magnificent view, first of Karisimbi and then of Sabiin, every detail of their wild lava streams and rain-scored slopes showing clear and sharp in the keen evening light. The lower flanks of the mountains were covered with heavy forest, but the higher slopes were clothed with a short vegetation which seemed to follow their forms like a glistening covering of green plush. The crest of Sabiin is of sheer black rock, which rises in a succession of dizzy cloud-spanned precipices into a sharp peak, which very perceptibly overhangs towards the east.

Looking west towards Kirungu Cha Gungo, the great cone now rose bare and brown over the green forest of the lower slopes, with a lacework of fine black lava streams descending from the crater's lip. From the crater itself huge masses of steam and smoke rose slowly, and drifted away into the rain and mist. Further to the west again there was another cone rather lower, and not so steep, from the summit of which black smoke was issuing, and along the lower lava streams near the top there were strings of fumeroles giving out brilliant white jets of steam. This is the mountain which Götzen described as the second active cone of the series, and named Namlagiro-ya-Gongo.

From both this mountain (which we heard the natives call Kirungu Cha Moto) and Kirungu Cha

Gungo huge black lava streams of recent date descended through the forests, like vast black rivers, which joined and looped round patches of still standing green forest, and then joined again. They were in places miles across, and all those which we could see trended away to the south down towards the flat, hot, game plains south of the

Euphorbia trees on the Katwi plains.

Albert Edward Nyanza. From their character and freshness, it is probable that all these streams were formed during the eruption, part of which Count Götzen witnessed, in 1894.

Kirungu Cha Gungo, before our visit, had only been ascended by Count Götzen himself, and it was therefore of interest that we should endeavour to reach the rim of the crater also, and verify the height which Götzen had

obtained of 11,300 feet. From where we stood there did not appear to be any difficulty in the ascent, and I retired to rest filled with the pleasant prospect of starting to the mountains on the following day. Once more, however, the beastly native broke in upon my dreams. I was sound asleep, and it must have been in the middle of the night, when I was suddenly awoke by shouting in the direction of the cow-shed, and finally by the loud bang of one of the old German Mauser rifles carried by the guard. Almost immediately three or four more shots followed, and I sprang out of bed thinking the camp must be rushed. When I looked out everything seemed in confusion, but as soon as we could hear ourselves speak, it appeared that all the guides lent us by the chief had made a bolt of it together from the shed ; they had knocked over the sentry as he sat by the fire outside, and clubbed him with a stick. In the scuffle which followed his rifle had gone off, and one of the guides was shot through the body, and died in a few minutes, while the sentry had held another till the rest of the guard came up. These continual uproars and suspicions, and these sudden violent disturbances were really becoming terrible, and I began to wish we had never set foot in the cursed country at all.

CHAPTER XIV.

> "A land of old upheaven from the abyss
> By fire, to sink into the abyss again!
> Where fragments of forgotten peoples dwelt,
> And the long mountains ended in a coast
> Of ever shifting sand."
>
> —TENNYSON.

MORNING, however, brought a change. Nature repairs her ravages, as George Eliot said, and daylight broke as cold and clear and brilliant as it does in an English June; and when we looked round, moreover, we saw, to our immense surprise, that the tip of the great cone of Karisimbi was covered with a white sprinkling of snow. We buried the wretched guide who had been shot by the sentry the night before, like "Bartholomew out in the woods, in a beautiful hole in the ground," and then sent out to the local chiefs, who after a time came in. I spent the morning trying to make arrangements about getting up the active cone. The negotiations were long and tedious, and were carried on in something after the following manner:—

"Good morning, chief."

"Good morning, white man."

"Which is the best way up your cursed mountain yonder?"

"There is no way up."

"But I am going to make a way."

"No one ever goes there; it is full of devils."

"Can I get food and water on the way for my men?"

"There is no food."

"Is there food here?"

"No, not enough to feed a baby."

"How do you live; you look as if you fed?"

"We have no food."

"What do you live on then?"

"We don't live; we die."

"Is there any food near the mountain?"

"No, there is no food anywhere."

"Are there any people near the mountain?"

"No; and when you go there, they will all run away."

"Are there any paths beyond those villages which we can see away up there?"

"We have never heard of any."

It was not promising, and in consequence of the stupidity and shyness of these people, my first attempt upon the cone was a complete failure. It appeared from where we stood that the great black lava streams which showed up through the forest towards the north were fairly smooth, as if there was much ash upon them; and I came to the conclusion that if I pushed my way through the narrowest belts of forest which separated us from these lava streams, the ascent would be comparatively easy. I therefore told Omari Kidogo to get twenty men ready with their food to start next day. The natives had told us that there was no water to be found in the porous lava and ash of which the great mountain was formed, and I therefore had a big tin filled with water as a reserve. We set out, and our descent into the valley, which lay between the slopes of Sabiin on which our camp was pitched and those of Kirungu Cha Gungo, was quickly accomplished, and we finally struck

into the heavy forest which clothes the long lower slopes of the active cone. This forest we found at first to be very heavy and very picturesque, but it soon gave place to excessively thick bush growing on rough ground, composed of old lava covered with moss. It was positively dangerous walking here, as the moss-clad lava broke under our feet

Elephant Camp and the Southern spurs of the Mountains of the Moon.

like glass, cutting the porter's shins in a wretched manner. After a very trying march, we found the bush to end abruptly on the fresh lava, which towered over the sort of forest in which we stood, in huge banks composed of tumbled, broken masses of slag and stone, sixty to seventy feet in height. We scrambled up, but on the top of the stream things were no better, and as I looked up the miles of charred and jagged desolation which separated us from the

steaming summit, I began to realize that any attempt by way of the lava streams, with bare-footed natives, was foredoomed to failure. It still seemed, however, that further up, near the saddle between the two great cones, there was much more soft ash, and I therefore decided to cross the stream we were on, and to attempt to follow a long tongue of forest which stretched nearly to the saddle between the peaks. Having crossed the lava, which took about two hours and was terrible for the men, we found that the forest was almost impassable, for it grew on very rough ground, and was very thick indeed. I clambered out of it back on to the edge of the stream and sat there debating what we had better do, but before we had decided a terrific thunderstorm came on with such fury that it settled the matter for the time being. The rain came down in solid grey floods, and we took what shelter we could under some bushes and under a small patrol tent. It was almost mid-day, but as the storm increased the gloom became so great that I could only see the frightened faces of my men momentarily in the red glare of the lightning, which lashed through the sky, accompanied by short crackling reports that almost deafened one. It was the very worst storm I ever saw, and at its height the heavy gloom which surrounded us was almost continually lit by a flickering red flare of lightning, which appeared literally to pour over us and around us on to the ground. When it was over we gathered ourselves up in silence, and went up on to the lava again as it were to take breath.

It was now already afternoon, and I saw that our only chance lay in recrossing the stream to a point in the forest higher up, from whence we could endeavour to cut our way directly towards the cone.

The wretched porters came very slowly over the

spiky lava with their bare feet, and by the time they had all got across it was already twilight, and we had lighted our fires in the shadow of the forest, just at the edge of the great desolate calcined fields. Our entry into the forest was here made difficult by the charred and fallen stems of giant trees, which had been swept

Another view of Elephant Camp.

down on the lava from above when it was still hot enough to flow. These fallen giants were now moss-grown, and as I sat upon them on the edge of the stream, watching the last of the men come in, the two great cones of Sabiin and Karisimbi came out of their clouds and stood for perhaps a quarter of an hour, vast and dark against the pale eastern sky, then they wrapped themselves up again in fold upon fold of

mist, and I began to realise that the great ghostly forest was a very wet and a very unpleasant place, and that I had better make the best of a bad dinner and go to sleep.

Next morning we rose early and began at once to cut our way into the darkest and heaviest forest I have ever seen. Nothing could be made out beneath the gloom of the gigantic trees which arched together over our heads, except a wilderness of moss-clad dripping creepers which swung in endless rows from the upper branches of the trees, and dangled into an undergrowth of bushes and stinging nettles, that grew to a height of twelve to twenty feet. I had therefore simply to direct the men by compass to a point in the direction of which I knew the cone must lie. The monotonous chop, chop of the knives in front, and then a step forwards, went on hour after hour, until about eleven o'clock, when we began to ascend rapidly and got into a very bad place. We had followed an elephant track, and this led to the edge of a crevasse, along which we had to cut our way back again for perhaps a quarter of a mile. Afterwards, by following an old lava ridge, on which the forest was thinner, we emerged into an open space of grass which was covered with fresh elephant spore. Here we had lunch and were serenaded by a band of cheerful elephants, who trumpeted loudly in the forest to the west. About the same time the clouds rose on the dark slopes of the mighty cone and then rolled off altogether, leaving every furrowed ridge and gully on its steep bare sides brilliantly cut, and looking in the clear air tantalisingly close to where we lay.

I pushed on at once, for unless we slept near the

top, it would be impossible to reach it, as the men, I found to my disgust, after their manner, had brought but little food. Further up the forest became again very heavy, and the ascent very steep, but although we moved on without stopping, when the upper twigs and branches of the great trees that surrounded us

Camp on the road to Fort Jerry with the outer ranges of the Mountains of the Moon.

became pink with the setting sun, we seemed hopelessly in the forest still. My aneroid read 10,000 feet, and I should have gone on still in the hope of getting out of the wood, but now the Sudanese, whom we had brought with us, became ill with mountain sickness, and as I saw no prospect of getting out of the terrible jungle in which we lay, or of finding out where we were that day, I decided to

give it up. We therefore returned, reaching the place where we had lunched, and we camped. When the moon rose, the great cone of the mountain appeared above the trees clear and wrinkled and furrowed with shadows, which formed a sort of broad grin as if it was laughing at our discomfiture on its slopes. We spent a very cold, uncomfortable night; the men were wretchedly thirsty and had no water; and almost before dawn we began to retrace our steps, marching to a chorus of elephants, which trumpeted in the woods most of the way, reaching our camp about three o'clock.

So far, then, the mountain had very much got the best of it, but after my return to camp we decided to make another attempt, Fergusson and I going together by another route, straight at the cone. This time we took four large tins of water, and we also induced some natives to show us the way along their paths to some huts which we had seen on a secondary cone on the first slopes of the main mountain mass; we also took several live goats for food for ourselves and our men. For this kind of work live goats are invaluable; they can climb almost anywhere where a man can: they are not like inanimate provisions; they do not need to be carried, and they can be killed and eaten whenever they are required. Moreover they are fresh meat, and that, for arduous work, is a great thing. It was indeed through their use in this way that I was afterwards successful among the snow peaks of the Ruwenzori mountains.

After our second start we reached the huts which I had seen on the secondary cone about noon. Here we found a few native gardens, and a most genial old

chief. After some conversation, we induced him to show us the tracks which extend further up the mountain and have been used by the natives when setting traps for Hyrax and other game. He said, however, that he would not go up the cone itself, as it was full of devils, and that neither he nor

Scene in the lower forests on the Mountains of the Moon.

his father before him had ever set foot upon it. He led us a long way, and finally lost the path, and he was then determined to circle round the great cone along the game tracks. After meandering about in this way for some time and not getting any higher, we decided to strike straight into the forest in a bee line for the cone itself. Although heavy, the vegetation here was not nearly so big as that encountered on my first journey

to the north; and after a time we began to ascend rapidly, the ground becoming so steep that the porters were continually falling forward as we stumbled along. Towards evening matters changed; we began to obtain glimpses of the surrounding country, away behind and below us, a gleaming stretch of Kivu appeared among the capes and bays in the south, while directly behind us there rose the dark spurs of Sabiin and Karisimbi, sharply cut off above by curtains of heavy cloud. We also began to get clear of the heavy timber, coming up into small forest and heath trees at an altitude of about ten thousand feet. One of the men here was unable to go on. I gave him brandy, and we decided to camp a little higher up, sending out some men who carried the sick porter in to the camp. He appeared to be suffering from mountain sickness. The wind was bitterly cold, and some time after we had lighted fires and the camp was beginning to shake down I found that the porters, instead of bringing the sick man into the shelters near the fire which they had made, had left him about twenty yards further down, heels up, and without a rag of clothing. I found also, to my dismay, that by some stupidity my own blankets had been left behind at the camp, and I was obliged to make myself as warm as I could with one of Fergusson's and the help of a fire. The ground where we slept was excessively steep, and we had to wedge ourselves in among tree roots, or, after falling asleep, we rolled down out of our blankets into the bitterly cold wind.

Shortly after daybreak we again went on, getting clear of the forest in about an hour, and coming finally on to the bare lava and ashes of the cone, among which there grew stunted and more or less scorched heath

trees. We stumbled up through these until near the top, and all the way could distinctly see the clouds of smoke and steam rapidly rising from the crater itself. As we neared the summit the ascent became almost precipitous, but we finally got out on to the rim of the great cone, which we found to be composed of lava, and which broke away immediately before us into the vast abyss of the crater itself. The morning around us was clear and sunny, but the immense mouth of the volcano was full of steam and smoke, and looking into it we could see nothing but the frowning edges of a perpendicular descent. The crater is a good deal more than a mile in width, and its base so far below where we stood that blocks of lava dislodged into it merely crashed and splintered and bounded from ledge to ledge, until they finally disappeared both from sight and sound. The men as they looked into the dark ominous cavern were frightened and nervous, but the remaining goats ascended the black pinnacles bounding the abyss and stood peering into it, with their long beards waving in the wind.

Looking away from the crater, the view from the summit of the mountain was superb; the bays and capes of Kivu stretched away into a blue haze in the south, while far away to the north, beyond some endless yellow plains, there gleamed the white water of the Albert Edward Nyanza itself. Further west, there appeared the high, scored, green ranges, forming the western wall of the central valley, their flanks covered with black shreds and patches of the Congo pigmy forests, and away again to the east, between the cones of Sabiin and Karisimbi, there appeared the opposing wall of the great valley. We took boiling point observations on the rim, which made our altitude 11,350 feet.

Götzen's observations on the point which he had reached, not quite the same, had made it 11,300 feet, so that the altitude of this, perhaps the most important and interesting mountain in Central Africa, has now been definitely fixed.

CHAPTER XV.

> " But piled with summits hid
> In lines of cloud at intervals
> Stood many a mountain pyramid."
>
> —SHELLEY.

WHEN we left our camp, to make the second and successful attempt on the cone of Kirungu Cha Gungo, we had arranged that Omari should move the rest of the expedition on to another camping ground, one day's march away, on to the northern slopes of the great extinct cone of Sabiin. We did this because it had rained almost without any intermission day and night on the southern slopes of this mountain. Although it was often clear for a few minutes at dusk and dawn, the delicate mist wreaths which formed round the dank green crest of Karisimbi about sunrise would gradually increase and descend and finally spread westward in a canopy of heavy cloud. About nine o'clock, all the time we were in the neighbourhood it was raining heavily, and continued to do so more or less throughout the day. The camp was wet and cold, and the men, as one might expect even after my return from the first attempt upon the cone, were suffering from exposure.

We returned from the top of Kirungu Cha Gungo, therefore, not towards the old camp, but in the direction of the new one. We made very good progress during the

day, and at sunset were among the wet grassy hollows in the V-shaped valley between the cones of Kirungu Cha Gungo and Sabiin. Fergusson and I were both very tired, but we made some sort of a meal of Bovril and whisky, and then sat smoking in the little patrol tent, for a hopeless downpour of heavy rain had again come on. Later on it cleared, and I decided to push on to the main body of the camp by moonlight, Fergusson, who had not been well, preferring to remain where he was, in the tent, for the night. A grunting, "low-down native," with no clothes in the cold wind but a belt of sheepskin an inch and a half wide, showed me the way. It led up hill and down dale, over rivers and through forests, under great trees where the shadows were as black as night, where the ground was full of snags and holes, and we were afraid to move for fear of elephant pits; down into steep cañons, through roaring streams, until, after stumbling blindly along for several hours, we came on to the flatter ground which is formed by the great northern slopes of Sabiin. Here the way was over bushy land, and in the clear blue moonlight I could see the huge black lava streams straggling away to the north into a vast depression, which stretched out, indistinct in that direction, apparently to infinity. Far away over these lava slopes, which descended from the twin active cones, there appeared in the west, indistinct and mysterious in the moonlight, a long range of distant mountains; and these were in reality a continuation of the mountains north of the volcanoes forming the western edge of the great central valley of the lakes.

The night was chilly and cold, and as we passed some irregular ground there came borne on the damp air a sudden and a sickening stench. It increased with every step,

and then there appeared two or three black objects, lying about among the bushes, over which the moonlight played in such a way that one could not at first realise whether they were logs or what. Nearer, however, they showed up clear and ghastly enough as the bodies of two men, with their flesh washed partly off their white bones and

Forest and moss at 10,000 feet.

tendons by the endless heavy rain. Only a mile or so on we passed another, and I thought we had encountered as many corpses as we were likely to see in one night's ordinary travel anywhere, but on a further rise the guide lost his way and we waited on the edge of a deep valley, until he enquired among some huts on what particular ridge our camp had been pitched. I was very tired and

sleepy, and while he was away, I sat down on what I took, in the black and white shadows of the moon, to be an old log. It had not the consistency of a log, however, when sat upon; in a sort of sense it gave way, and when I put my hands down on to it they pushed through a rotten surface, beneath which protruded the white, long since dead, and rain-washed bones of a man. I got up and said nothing, for I thought it was quite time to be moving on, so I called the guide back. I abused him in all the languages I knew, and I beat him with a thick stick, for ever bringing me into such a ghastly sodden graveyard as that through which we had just passed. It was like the country described in "Maud":

> "Wretchedest land since the world began,
> They cannot even bury a man,"

but leave him to rot anywhere he may happen to be about the soaked country side. I pushed away by myself to a hut in which there was a fire. It was crowded with natives, some asleep on the floor, some huddled round the fire, like the evil spirits of the weird country in which they lived. We pulled down the door of the hut and looked at them. As soon as they saw it was none of their own people who had approached, but a white man with an armed guard round him, they rolled on the ground like the vile beasts that they were, and spat and did other things, to show that being surprised in their filthy hot den, which reeked with smoke and their own peculiar stench, they would do anything as long as their wretched selves were not speared or killed. It took us nearly a quarter of an hour to make them understand that we did not want to touch them; that we only wanted to know the way to our main camp, and that we would then depart,

giving them cloth and beads. After a time, however, and after having it repeated to them over and over again, it seemed to dawn on them that this was perhaps really all we wanted, and a wrinkled old caricature of a man, with the flesh hanging in folds over his stomach, probably through eating uncooked beans all his life, and looking very much like a celebrated picture of Job, pointed out to us that we were some way off the camp, that in fact it lay on another ridge altogether and on a different path. We reached it about two in the morning, the sentries challenging us fiercely in the dark as we approached. I roused up the men, drank a bottle of champagne, and went to bed.

I slept till late in the day—it was, indeed, only the noise of Fergusson's arrival in the camp which awoke me; he, too, required stimulants, having passed the putrefying men along the road, and in broad daylight.

Morning showed us a wonderful landscape; we were on the north-west slopes of Sabiin, looking west and north, with the two great cones of Kirungu Cha Gungo and Kirungu Cha Moto striding away from us across the valley towards the west. The delicate western slopes of these mountains abutted abruptly on to the long ranges of green and purple scarps which bounded the horizon to the west, and which form the western wall of the great valley of the lakes. Before us to the north the long volcanic slopes descended gently and far into a boundless sea of yellow sun-scorched grass, which covered the flat bottom of the great valley of the lakes as far as the eye could see, or nearly so, for against the distant western ranges, far away to the north, there appeared the pale glint of a watery expanse, which was in reality the southern bays and creeks of the Albert Edward Nyanza itself.

What was most surprising, however, was the contrast in colour between the wet, dank, green mountain slopes over which we had passed and the almost equally green and damp shores of Lake Kivu and those yellow desert-like plains, which now lay shimmering in heat and haze away to the north. We were, in fact, on the narrow sloping boundary between two entirely different climates, and all this day and the next we were walking down out of the wild wet forest and the rain-shrouded uplands of the Mfumbiro mountains and the Kivu regions, into the blue heat and scorching cloudless days of the ordinary tropical African climate.

The change was marvellous, for we had been, at and above a level of five thousand feet, for some six weeks or more exposed to cold and rain as trying as that encountered in the worst type of an English November. We were now dropping every hour into the old familiar scenery of sun-swept plains covered with tall yellow grass and studded with gigantic clumps of trees, now a euphorbia and now some huge African figs, which spread their heavy foliage over a dismantled group of huts. The air was warm and dry and the sunshine fiery, while behind us rose the wild seared forms of the volcanic cones, with their heavy canopy of cloud drifting in sheets of rain and purple shadow behind them to the south and west.

But besides being strange and new and surprising, the scene before and around us was most interesting; its features in fact threw in an instant more light on the past relationships of the long chain of lakes which stretches from Tanganyika to the Albert Nyanza, than anything which I had hitherto seen.

It will be remembered that on passing north up the great central trough beyond Tanganyika we found that

this lake had at some time extended north for a considerable distance, but that its old northward extension had apparently always been barred by some high ridges which run diagonally across the trough for many miles south of Kivu, and which rise to a height of six or seven thousand feet. It is, indeed, these great transverse ridges, partly obliterating the great trough, which hold the water of

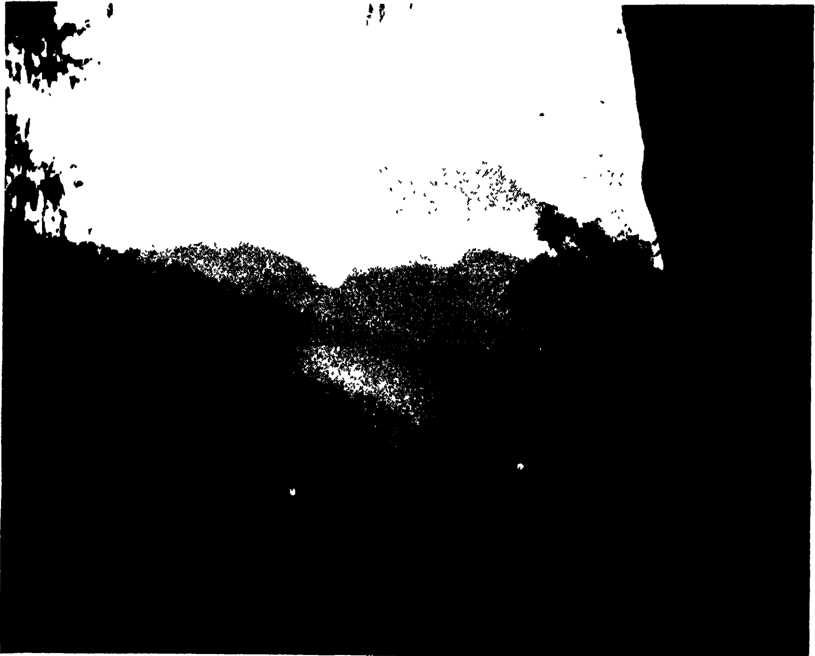
View in the bamboo zone on the Mountains of the Moon.

Kivu at its present surprising height of nearly five thousand feet above the level of the sea. The outflow of Kivu we found pursued its way out over the top of these ridges in the shape of the Rusisi river, and the channel of this river, where I examined it at its upper end, appeared to be, geologically speaking, very new. Nearly seventy miles north of the open portion of the great central trough in which Lake Kivu lies was, we found, again

blocked, not this time, however, by old eruptive granitoid rock, but by the huge accumulation of modern matter, composing the volcanoes of the Mfumbiro range, which lie transversely to the long axis of the great central trough. From where we stood now we looked over the northern slope of this great volcanic dam, and could see it descending between the sides of the gigantic trough, until it ended in what were almost without doubt alluvial and lacustrine plains, which extended beyond the volcanic slopes northwards, and lay at about the same level as the gleaming waters of the Albert Edward Nyanza.

We had seen while we were on Kivu that this lake now contains nothing but a typically fresh water fauna of mollusca, fish, etc. In fact, it has the fauna typical of a great upland pond, but up to this point in our journey I had not felt sure that the present fauna of Kivu might not have originated afresh from the surrounding rivers, after the volcanic disturbances had destroyed whatever types of animals had existed in the lake itself. There is now no water connection between the Kivu and the Albert Edward Nyanza basins. The great modern volcanic mass covers all up between, but it is obvious, from the similarity between the live shells in Kivu itself and the dead shells which we found subsequently during our journey in the cuttings of the Ruchuru river, which flows from the northern slopes of the volcanic dam into the Albert Edward Nyanza, that at one time there was water, one lake, or a chain of connected lakes, extending all the way from the site of Kivu in the south to that of the Albert Nyanza in the north, and that the water in these districts, neither in the present nor in the past, has contained any trace of the characteristically marine animals found in Tanganyika still further to the south.

Thus it appeared at once, as I looked over this district, what had been the main features of the past history of all the lake north of Tanganyika; and subsequent observations relating to the fauna of the Albert Edward and the Albert Nyanzas, and to the past and present levels of these lakes with respect to that of



Portions of the central peaks of the Mountains of the Moon from the bamboo zone.

Kivu, entirely confirmed the impression which the character of the land over which we had passed up to this point in our journey had produced in my mind.

The subject is more fully discussed in the volume in which I have described the purely scientific results of the present expedition; but it may be stated here that the facts which I have above enumerated show dis-

tinctly that at some time not very long ago, Kivu or a lake in its bed was connected directly with the Albert Edward and the Albert Nyanzas; that all these lakes were probably a little higher than the Nyanzas are now, something over 3,000 feet, but not nearly so high as Kivu is at the present time.

Besides those above stated, there are many other reasons for regarding the time when Kivu first flowed over into Tanganyika as not by any means remote, not least among them being the fact that the water of Kivu is very strongly impregnated with saline matter, although the lake has a much larger outlet in proportion to its bulk than has Nyassa. There are, moreover, certain facts relating to the animals found in Tanganyika which are only explicable under some such supposition. For the details of these matters I must, however, refer the reader to the other volume; all I wish to do here is to awaken interest in the very important rôle which the Kivu region and its modern volcanoes have played in the formation of some of the broadest features of the African continent as we now see it.

After the Kivu drainage area had drained northward for an unknown time, the volcanic disturbances took place in the Mfumbiro Mountains, and ultimately resulted in the formation of the present lofty cones, but as the activity has unquestionably proceeded from east to west, successive cones having been formed one after another in this direction across the floor of the great central trough, it is probable that the final separation of the Kivu and the Albert Edward basins has happened actually in quite recent times; for this separation is at present simply effected by the western slopes of Kirungu Cha Moto, which run up to and abut against the western sides of the great central trough, and at

their lowest points are not very much above the level of the waters of Lake Kivu itself. After the formation of this dam we have, as I have explained in the volume dealing with the scientific work of the expedition, direct evidence to show that the water in Kivu gradually rose until it flowed across the top of the ridges to the south which had previously separated the basins of Tanganyika and Kivu from all time.

Cut off from the great drainage basin of Kivu the waters of the Albert Edward Nyanza and the Albert Nyanza shrank and fell considerably, as is evidenced by the old beaches and water-marks all along the shores of these lakes; in fact, it is probable that it was at this time that the two Nyanzas became separated from each other as distinct lakes, for the whole of the great Semliki valley stretching between them is nothing but the floor of what was once a lake; indeed, the floor of an old lake has become dry in places, and the lake that was is now represented by a string of shrinking pools.

In this curious and interesting way, then, has the whole character of the watershed of Central Africa been changed; one huge lake, Kivu, has been added to the Congo system, while at the same time a large drainage area has been cut off from the tributaries of the Upper Nile. Both these results of the formation of the, geologically speaking, recent Kivu dam have probably had very wide-reaching results, in completely changing the geographical features of an area of the African interior which is bigger than the whole of Europe.

If we look at the Luakuga, the outlet of Tanganyika as it now exists, it is a river not nearly so big as the Rusisi which flows into Tanganyika, from Kivu, and

therefore if we were to shut off the Rusisi from Tanganyika, the latter lake would cease to overflow. The Rusisi was not always flowing out of Kivu to the south as we have seen, and therefore it is extremely probable that the connection of Tanganyika with the Congo also is of recent date.

When the volcanic dam north of Kivu was first formed, its effect would be felt to the north much sooner than in the south, for it would mean that the whole drainage area of Kivu was cut off from the Nile. We know that there is evidence in history that on the Upper Nile there existed huge lakes, which have now dried up and disappeared, and it is quite probable that the shrinkage of the upper waters of the great river of Egypt which appears to have taken place is directly connected with the formation of the Kivu dam. After this dam was once formed, not only must the Nile supply have shrunk, by the very large amount of water collected from the Kivu drainage area, but the water to the south of the volcanic dam, which was imprisoned still further to the south by the old ridges separating the Tanganyika and the Kivu basins, must have slowly risen year after year, and probably century after century, until it reached its present extraordinary high level, and then flowed over into Tanganyika.

From the foregoing interesting reflections I returned to the somewhat hard and less edifying realities of the eastern flanks of the great central trough of the African lakes, along which we were now moving. After some distance we left the slope of this trough, and struck out over the flat plains to the north. We passed alternately through patches of forest, through plantations, and over expanses of yellow grass, and towards mid-day we reached a village

of some pretensions on the eastern edge of the plain. The people were shy and fled at our approach, but after a time came near enough to speak to us while we were lunching in the shade of their banana trees, which formed a pleasant screen from the now powerful sun. In about two hours the chief decided to give us guides to take

Crossing the heath forest in the Mountains of the Moon.

us on to the next Sultan, near the south end of the Albert Nyanza. The country was becoming again picturesque; it was, in fact, assuming that park-like appearance which the alluvial plains of Africa have been found again and again to present. The shyness of the natives was, however, very troublesome, as it made it impossible to be sure of getting any food for our hun-

dred and odd men. Towards evening we approached a village, but long before we were within shouting distance we saw the inhabitants streaming away, with their goats and sheep and fowls. We halted on a ridge about half a mile from the native town, and our guides, who had come to introduce us to the Sultan of this place, tried to get into communication with the timid villagers from a small hill-top. There they stood in a group, eight of them, with their presents of white cloth blowing off their black naked bodies, gesticulating with their broad-headed spears and bawling at the tops of their voices, "Mho Mrabbi, Mho Mrabbi, Mho Mrabbi, Mhey! Mho Mrabbi, Mho Mrabbi, Mho Mrabbi, Mhey!" But it was not till after a long time that we got the people to speak to us, and finally to sell us grain and bananas and two goats for the men. Our loud-voiced guides then said adieu to us, as they were afraid to go further afield among the wild people of the surrounding district; and the chief of the village himself volunteered to show us the way to the next camping ground, over the plains to the north.

CHAPTER XVI.

"And thy heaven that is over thy head shall be brass, and the earth that is under thee shall be iron. The Lord shall make the rain of thy land powder and dust."

—*Deuteronomy* xxviii. 23-24.

THE vast desert-plains which form the floor of the great central valley south of the Albert Edward Nyanza, and over which we were now travelling, are diversified by a number of dry river beds and water cuttings. These rivers, when they flow, descend from the flanking hills and sooner or later join the Ruchuru itself as it meanders from the south to the north down the centre of the valley. In the hollows formed by these departed watercourses and along the banks of the existing streams there are thin woods, chiefly composed of acacias and euphorbias, which are intermixed with open patches of desert-like sandy ground, much as they are in the better-known territories of Somaliland; and as we gradually entered this typically African scenery, we also entered a land of game. Hitherto we had seen no more game than is usually met with in traversing any part of the great interior. There had been everywhere a certain amount, but, except on the plains north and east of Nyassa and south and east of Tanganyika, we had obtained nothing extraordinary in the way of sport. We had, indeed, encountered plenty of eland, water-buck, reed-buck, zebra, roan antelope, and puku on the Tanganyika and Nyassa plateaux, and while

Fergusson and I were in company with one of the African Lakes Corporation's agents on the way to Abercorn, our temporary companion had shot four mare zebras in about as many minutes, out of a single herd. At the time, this proceeding had moved me to some wrath, and I had remarked to Fergusson that the sporting instincts of our friend resembled those of a butcher.

African shooting is generally not to my mind much of a catch, and I very much agree with Professor Scott Elliot that, beyond the name of the thing, it usually consists, in actuality, in crawling to infinity on your stomach, with the vertical sun on the back of your neck, tearing your hands, and losing your pipe and your temper, until you finally have the satisfaction of discovering that the small herd of buck which you have stalked with so much trouble have, as a matter of fact, been all the time quite well aware of all your movements, and are now moving awkwardly but rapidly away out of shot. Indeed, all the places where I have had really good sport in the interior, or where anyone could get it, could be counted on the fingers of one hand.

I remember, however, in the old days—that is, in 1895, before the Jameson raid and the Matebele war and the attempt to develop Rhodesia had made a hell of the place—having some really splendid shooting up the Pungwe river, on the plains behind what was then the quaint little sandy port of Beira. It was the end of the dry season, grass was just beginning to spring up again under our feet on the park-like plains, which were alive with fluttering, rattling, glistening clouds of brown locusts, and with literally thousands of game. There were herds of buffalo, hartebeest, and other buck in all directions, and one could stalk them at leisure, both at dusk and dawn, picking out some big buck or other and dropping him flat with a long

In the upper part of the Mobuko Valley in the Mountains of the Moon. The forest on the ridges is composed of heath trees 70—100 feet in height.

singing shot. We had had, as I have said, fair sport in the interior on this occasion, but at no time had I ever found any of these inland districts at all comparable to what the flats were about Fontesvilla and Beira several years ago, and I had grown accustomed to the idea that such places which recall the old stories of the early sportsmen in the Cape were now no more. After emerging from a deep-river cutting on these plains south of the Albert Edward Nyanza, however, my gun-bearer dropped down and whispered, "Nyama, bwana, nyama!" ("Meat, master, meat!"). Our camp larder was empty, but the meat, the breakfast and the dinners and the suppers of many days, was standing on the level plain which opened up in front of us as we emerged from the river bed. There were hundreds of head in sight, different kinds of antelope grouped together in various coloured clumps. Nearer at hand than the rest there was a group of big black brutes which I did not recognise, and I hastily crept forward to get a shot, an old ant-hill affording excellent cover; after a short crawl I reached this, and carefully looked over on the other side. The buck was standing looking towards me and apparently about two hundred yards away. It had not seen or even winded us, but it had heard the caravan, for its horned-head and its great ears were pricked towards the line of march. Even now I could not make out what these big dark-coloured buck might be; we could eat them, however. My rifle on this particular occasion actually was ready; there was a big fellow standing by a tree; the white ivory foresight came down into the V of the back until it only just showed as the faintest speck against his dark coat, and then I pulled. The whistling split bullet screamed with a psh-sh-sh over the plain and buried itself without any other sound in the sand, a little puff of dust

marking the place where it had struck some yards in front of the astonished buck. He was further off than he looked. I slid in another cartridge, put up the three hundred yards sight and brought the white ivory foresight again into position, and pulled. The psh-sh-sh of the bullet ended this time with a sharp plop, there was no dust spirt, and the buck dropped flat in his tracks. The herd started, but did not move until I had sent three more shots, each of which ended with the peculiar plop which characterises a hit, and there were four buck lying on the plain. " Dropped," as Fergusson remarked, " in less than a minute out of a single herd," and, as he continued, " There was a man once who called another a damned butcher for the selfsame thing." When people have inconvenient memories it is well sometimes to say nothing. It is better to light a pipe and smoke, and look blandly at the accuser from the top of an ant-hill as one who is caught out flatly and unashamed. I occupied myself in this way while the men went forward to look at the slain beasts and make out what they were. They turned out to be two Senegal hartebeests and two water-buck. The old chief and his men who were acting as our guides were delighted at the prospect of fresh meat, for although antelope of many kinds literally swarm upon these plains, the people in some of the villages were actually short of food. They were, in fact, such colossal fools that they could not even dig a pit for the game to fall into. Like the people of the Kirungu districts, these tribes were also characterised by their habit of eating all their victuals raw. Directly the buck was shot on the particular occasion I have just described, they crowded round the bodies of the huge antelopes and tore off pieces of the flesh with their hands, cramming both it and its hairy integument into their mouths in masses that looked big

The snow summit of Ingomwimbi, one of the high peaks in the Mountains of the Moon. *(See p. 299.)*

enough to choke a bloodhound ; they grunted and spluttered over the entrails and the offal, their faces and their bodies covered with blood and sand, and crept about on all fours like weird carnivorous quadrupeds, with yards of hot entrails hanging from their huge mouths and their white blood-stained teeth. The sight made one perfectly sick, and although they were soon nearly choked with blood and raw flesh, we had actually to drive the chief and the guides away with sticks from the meat which we could not carry off.

The day was already well on and we had evidently far to go. In the north, over the vast arid grey plains, which were steeped in the golden afternoon sunlight and filled with the innumerable faint scents of this land of perennial summer, there rose a streak of smoke ; it was coming from some grass fire which the chief said was near the village at which we were to camp. He said, however, that it was late, and that he could find water at a place nearer at hand to which he would go. I did not see the inwardness of this move at the time. It was true they were leaving behind some of their beloved raw meat, but it did not occur to me that the old ruffian would deliberately plan our complete destruction on that account ; and so we allowed him to go on to the new camping-ground which he had named. We were, be it remembered, in desert country, hot desert country. We had been without water since morning, and, as Burton says, after twelve hours' waterless march in the desert, men are apt to die. We therefore moved anxiously after our guides, over low rises of bare sun-swept, sun-scorched, sandy ground, which was scantily covered with utterly withered grass and a few absolutely-leafless thorn-bushes, two or three feet in height. The golden evening was approaching, and faint, mys-

terious shadows were beginning to form in the hollows of the vast plain and to throw up its undulating immensities into a very vivid shape. We were adrift with our hundred and odd thirsty ruffians, with the fiery sun of the equator sinking, "robed and splendid," over the mountainous border of the pigmy lands on the western horizon. In whatever direction we looked, the desert seemed to stretch for miles and miles and miles. There was no green patch, no dark forest in any river cutting that gave hope of water for the men, whose generally continuous obscene chants had become hushed into the silence that characterises physical exhaustion, and the whole caravan now slouched on ominously quiet, the soft tread of hundreds of feet over the desert, only now and then proclaimed by the cracking of some dried herbage on the ground. Plodding on thus, in the deepening yellow light and the intense heat of the sinking sun, was anything but pleasant. We looked anxiously for the village where we were to sleep, and every now and then we fancied we could discern it; those were surely huts in the distance grouped along a ridge, perhaps two miles away, but as we approached the huts resolved themselves into shadows, stones, and dusky patches on the ground. The same thing happened again and again, but still the desert held its own. As the exhausting heat of the march began to tell on us, the trains and strings of fleeting thoughts and fancies began to pass through my brain, which, I have often found on marching expeditions in the tropics, proclaim that it is time to stop. As I walked mechanically picking my way after the old chief, every sort of thing that is good to drink flitted before my eyes with the strange realness that is born of an exhausted frame. I saw the proverbial six brandies and sodas set up in a row;

I saw cool streams falling into deep clear pools in the shadow of great rocks. I was drinking deep draughts of foaming beer, and now and then I seemed to be stooping beside an ocean of iced champagne. The rustle of our feet among the desert grass wove itself with the phantoms of a disordered fancy, into the ripple and murmur of lakes and streams. And so on and so forth, I made long excursions through cool places and passed "through strange realms of thought alone," after which I would come back suddenly to the African reality, that it was sunset, that we were out on the dry plains, and that we were desperately thirsty. Our limbs felt stiff and clammy and we actually shivered, although the heat was fearful at the same time. Omari and the sergeant had pushed forward; they were laughing and talking to the men, a bad sign, a sign, indeed, that at all costs the spirit of the banjo must be kept alive:

> "Oh, it's any tune that comes into my head,
> So I keep 'em moving forward till they drop,
> So I play 'em up to water and to bed."

The sun sank at length and the short-lived glory of the twilight died out among the stars. "The night rose up in silence," and we were still on the plain somewhere, but at the same time nowhere in particular. The guides seemed not only to have lost their way but their heads as well, they said they did not know where to go; and we in front halted in the deepening dusk, while Omari and a man who understood the language of our guides tried to make something out of the situation, which looked awkward in the extreme. We were some hundreds of yards in front of the men, and as I sat exhaustedly on the ground, the sudden evening-wind stirred the grass about our faces; it played with dried leaves for a second, and then threw them down

and rustled off into space. It was the herald of the hot limp night of the desert, and as it passed the plains sank into an unearthly hush. While I sat there, however, one of the Soudanese came up and whispered, "Bwana, maji Karibu!" ("Master, water is near!"). "There are men talking in the dark on the plains, and where men talk they drink." It appeared to be as he said, as we pushed quietly forward trying not to scare the people, whoever they might be; we listened in the dark, and heard first of all our own pulses beat, and then after a time we could distinctly make out natives talking in low tones some distance ahead. When we reached the spot we completely surprised a small collection of huts, but to our astonishment found that there were only about five people in one of them, and to our dismay these people, who sat on the ground shaking with terror, told us that there was no water near the village; that the village was indeed deserted on account of the drought, and that the little water they had with them they had brought for many miles. It was obvious that we should have to camp where we were, and make the best of the little water these people had and could spare. We gave them huge masses of meat in exchange for it. They seemed to be almost starving, having in fact come back to this village to dig up roots, and sat round the fires which we had made and ate the meat like long-limbed black wolves. The men were coming in with the loads, there was coming and going and confusion in the dark, and during this the sentry who was watching the old chief and the guides lost sight of them for a moment, and in the twinkling of an eye they were all gone.

What was the meaning of the whole business? It was difficult to say, but part of it soon became clear. This was not the village to which the chief and his followers

had originally intended to take us, for that, they said, was a large and populous place, and this consisted only of a few partially dismantled huts. We had, however, killed game on the road, and they had been loth to leave it; they appeared, therefore, to have first led us to a place where there was no water, and had kept us out till it grew dark, and at an opportune moment had made a bolt of it, back to their beloved meat. They probably knew where water was to be found within a reasonable distance of where the buck had been killed. One thing, however, was quite clear: the few men whom we had surprised in the village must be kept together at any price, and if necessary forced to go on with us to the nearest place where there was water, for the men were now becoming absolutely frantic with thirst, and with this end in view, we set about completing the camp. "So we resolve on a thing and sleep, so did the lady ages ago," and just as in her case, so in ours, the end was not at all what we anticipated. When, morning broke the natives, who had been guarded, said the nearest water was actually at the village to which we ought to have been led the day before, and that to reach this from where we were would take six hours' marching at the least. It was not cheerful, and the caravan set sullenly out just as the baleful sun flamed up over the east once more. We plodded on and on, through an endless flat, dead world, over which the sun flared, low and yellow, and lit up the far-off dry ridges, a few feet above the surface of the land which faced us blankly. Now and then we passed a few dead trees utterly blasted and blackened by the grass fires and the fiery heat, and peppered all over with fine blown sand. There was not even an ant in this strange scorched desolation in which we found ourselves. The blue sky

was simply arched over a grey lifeless infinity, over which the summer goose danced everywhere, like David, for all it was worth, and the rest was vastness, silence, and supreme heat. After a time, however, there came a slight change, the flat grew less regular, and at last there appeared game. It cheered everyone, for the water could not now be very far off. One big buck was standing some hundreds of yards away. Fergusson, who was in front, took a long shot at him; the bullet whistled over the plain, and the buck stumbled and stood still. Fergusson then called to me to fire, as he had no more ammunition ready. I drew a careful bead on his shoulder with the two hundred yards sight, and pulled. Again the bullet pished away, and again the buck stumbled, but, after a second, stood still once more, looking at us. I ran out over the plain, and on coming nearer saw that he was wounded and could not move. I fired again, and this time he dropped flat with a bullet through his head. When we came up to him we found we had made some funny practice with our first two shots. Fergusson's had passed through one of his forefeet just above the hoof, and mine had done the same with the other. Both shots had therefore been true in line, but we had under-estimated the range, and the bullets had fallen about his feet. We shot two more buck, a hartebeest, and a cobus cob, in a few minutes, leaving them where they were, to be fetched later when we had reached the village and the water, which the natives we had impressed to be our guides said was not now far off. After about an hour we came in sight of a village, a real village this time, but there seemed to be no smoke rising from it or life in it of any kind. We were on our last legs, and we moved on ever more anxiously as the deserted appearance of the place

became more apparent. It took another red-hot blazing hour to come near enough to the place to make anything out, but at last we saw that it was really deserted, that there was not even a dog in the white dusty lanes between the huts. Near the end of the village, which looked ominously like an old necropolis, there was a sort of a dry water cutting, in the floor of which there were a few green bushes, and among these the wretched men searched for water. There was none there, however, and the rest of the village, which was much further away than it appeared, seemed to be equally barren, until we passed over a second ridge and came to another dry water way, in one part of which there was a small stagnant pool. "It was crawling and it stunk." But it was liquid; the cows made for it, and the men made for it, and I thought they would have drunk it dry. I drank my last pint out of my water-bottle, which was cleaner, and then went on into the village to see what its peculiarly uninhabited appearance might mean; and as I went, it soon became apparent that the desertion could only have taken place quite recently, during our approach, in fact; the cooking pots were still in their places in the huts, while the remains of extinguished fires still smouldered. Moreover, there were a few fowls running about, which our men eagerly pursued, and, what was better still, Aden found, carefully hidden away under the floor of a hut, some sixteen large eggs. It is indeed in Africa, as I have before had occasion to remark, a particularly ill wind which blows nobody good, and by using these things which the natives had kindly left us, and by appropriating the chief's hut, which stood conveniently large and cool and open, we succeeded in making ourselves very comfortable indeed in the deserted place. It was a singularly charming village.

The ground between the huts was white and clean, the huts were also large and clean, and they were covered with the most picturesque green pumpkin plants and beautiful convolvuli. From the place there was, moreover, now that we could divest our minds of the hideous attributes of the desert plains, a most superb view over their level wastes of brown and yellow sand. In the far distance to the south there rose the gigantic peaks of the volcanoes, now mere blue shadows, a little bluer than the blue of the sky. East and west beyond the plains rose the walls of the great valley, very high and very far away, looking not unlike the hills which appear to the south, from Berberer. As we luxuriated in the deep cool shadow of the great hut, we became aware of one or two natives moving carefully about the plain to the west; and after a time it became obvious what they were about, for, although they would have nothing to do with us, and fled at our approach, they were by no means indisposed to profit by the white man's advent in another way. They were, in fact, making off as fast as they possibly could to where we had left the buck we had shot in the morning, in the hope of being able to steal the meat. It soon became apparent that behind the few stealthily-moving figures which we had first seen there were many others, and that if we wanted any meat at all for ourselves we must be quick. A number of men set off, therefore, towards the carcases, and arrived in time to prevent the natives getting there at all. The men and ourselves and the animals were all very much done up, and we decided to stop where we were in this village on the plain for two more days, during which time we had some superb shooting close at hand, and finally got into communication with a few of the natives of the district, although the

chief and the elders and the bulk of the population kept themselves rigidly out of sight. With some of these men who had now returned to their huts we arranged to proceed to another village which lay further on in the direction of the south shore of the Albert Edward Nyanza, and this important matter being settled, the situation in general gave us much food for reflection. We were, as Fergusson expressed it, now well out at the back of beyond, remote from any white camp or station, and in a portion of the country which had never been traversed by any European before. The district was almost a complete desert, the people were unfriendly and hopelessly stupid, there was little food, and our route lay away to the north over what appeared to be similar country, extending northwards until it terminated in the great swamps we had heard of as bordering the south shores of the Albert Edward Nyanza. We speculated on these matters as we sat smoking on the evening of the second day, while the level yellow sunlight lit up the beautiful blossoms and leaves which straggled over the huts, and then shot horizontally away over the vast plain with its wave-like undulations and abrupt dry river courses. Our men had had a terrible time, but they were now singing and laughing as they brought up the dirty water from the puddle which supplied the place. For these children of the hour, the past was as much past as if it had never been; their thirst and their weariness, their sore feet, and the long torturing marches which we had made, were past, and were forgotten in the temporary plenty of the oasis round the camp. They were singing as I have said, and among their many songs I recognised one which I had heard on the Tanganyika plateau, at Abercorn, in the old days when my friend Marshall was in command there. At that time the village maidens were

bringing the water from the stream, and as they passed the thatched verandah of our hut each was crooning to herself a pretty plaintive song, which does not lend itself to an English translation, but the refrain may be paraphrased in Latin thus :

Fac ipse periclum in se, quod rite matronas juvat.

Africa is still very much in one of the poet's cycles of Cathay, and even a twenty-five years' bringing up in civilization renders one almost unfit to comprehend, or at any rate appreciate, the mental fantasies of these children of the waste. For example, much as I have tried, I was never able to enter into the humour of the performances of our boatmen on Lake Kivu. These men, it will be remembered, fed on raw beans until they swelled out so much that their gradually distending persons used to squeeze the ticks and the lice out of the narrow bands of fur which they tied at daybreak round their middles. As they pulled over the lake, our Swahili boys would sing some meandering obscenity or other, and then these bean-fed scarecrows would take up the refrain, not in the ordinary manner, however, *sed cum oribus alteris*. Very unpleasant ideas and customs indeed, best shrouded in a veil of extinct speech. How these simple human beings would shock our dear old ladies at home, both male and female! Yet these mere savages were very fond of their own children and very mindful of the duties they owed to their own families. They were not half so vicious in intention ; they were, in fact, far better endowed with every admirable human attribute than many of our old maids at home, our pro-Boers, and pro-Boxers, and that large section of our modern communities which has been described as "the energetically ignorant."

I very much doubt if, judged by the Christian ethics for example, the average European could give these people a single point. Their iniquities, and they have many of them, surprise us only because we are new to them, and I have a strong impression that the ordinary iniquities of a European town would give them a similar shock. So we go to the African interior, and when we come back we look with other eyes, and hence the extraordinary cultural value which this sort of travel appears to me to possess.

Looked at from any outside standpoint, what a very odd spectacle the world is. It is indeed hardly to be wondered at that the Deuce was said of old to be given to wandering up and down in it, or that its real spirit should have been expressed by at least one great poet when he wrote among the shadows and the dead :

> "We thank with brief thanksgiving
> Whatever gods there be
> That no life lives for ever,
> That dead men rise up never,
> That even the weariest river
> Winds somewhere safe to sea."

CHAPTER XVII.

> "Come on, you thick-lipp'd slave, I'll bear you hence!
> For it is you that puts us to our shifts."
>
> —TITUS ANDRONICUS.

FROM this village on the plain we marched—where did we not march? Through thick bush, over low rises into deep water cuttings, and over great flat, park-like expanses of land, where game abounded and where we stalked till our tongues hung out of our mouths with heat and exhaustion. The caravan, however, was happy, for we had meat—red, raw flesh, covered with blood, such as the heart of a native loves, torn off the animals just after they had been shot, with their muscles still quivering and the pulsations of their hearts not yet stopped. We had old meat and young meat, grilled meat and fried meat, minced meat and chopped meat, and meat that had been cut into strips and dried in the sun. The men were distended so that they could hardly march, but they were fed and delighted, and coated with dirt and with blood. They were laughing and yelling in a fiery land, where there was enough water to drink, and, above all things, flesh.

There were, it is true, numbers of men who were becoming ill through over-gorging on animal food, but there were none, I believe, who would not cheerfully have died, so that they could fill themselves with meat until they

The northern snow ridge of Ingomwimbi from a point about 12,500 feet.

were dead. However, Fergusson and I, and Omari and one or two of the men, were intent on getting somewhere where there were vegetables, even if it was mere green grass. We were becoming afflicted with the passion which seems to have seized Nebuchadnezzar when he is said to have browsed like the cattle of the field; and with this object in view we were heading with our guides to a village which lay before us, so they said, only a short distance, and which was itself only one day's march from the famous Vichumbi, on the Ruchuru river, at the extreme south end of the Albert Edward Nyanza. When we approached this place it was about noon, and Fergusson pushed on with one or two of the men to get into communication with the villagers, if possible, it being thought advisable that I should not display the arbitrary characteristics with which I am accredited, at any rate too soon. I must confess that I hate jumpy animals, anything of the nature of women or horses, that you have to stroke and pat, and go through other idiotic performances, before you can get them to understand that you are not of necessity a grampus.

When I approached the village I found that Fergusson had actually got into touch with the natives. He was sitting under the shade of a tree with the chief, and around them were a number of elders, with long black visages of varying ferocity. The chief was himself a dangerous-looking animal, with white grizzly hair and bold protruding blood-shot eyes. He wore a coarse leather apron behind, and nothing else; he was fat and hideous and flabby. I told Omari not to let the men go near the village, but to pitch the camp a little distance away on some open ground, for the natives were evidently disturbed. All the rest of the people were, as a matter of fact, inside the

village with their spears and bows and arrows, and the great tree, which usually blocks up the door in an African town in time of war, was placed in position, facing us. To arrive at something satisfactory, we smiled sweetly and gave the chief a large present of cloth and beads, although I personally felt inclined to say, "Oh, great beast! here is something for you to take, and which may possibly tempt you into those ordinary civilities which you don't possess." But although we smiled, as I have said, he did not take the present pleasantly. He, in fact, threw it on the ground and spat on it, saying it was not big enough for him, for he was a very big chief indeed. He said further that he must interview his big brother, who lived a few miles off, and if his big brother consented he would allow his people to sell us grain and milk and other things. Hour after hour passed, however, and we got nothing; the people were most anxious to sell us grain, etc., but the chief would not allow them. It was utterly exasperating and hopeless, so we decided to give up the patting method and try other means. I interviewed the chief, and had him informed that he was a pig and a beast; that he might be a very big chief, but that I was a bigger, that I could give him points in chiefishness any day and have plenty left. I reminded him of an African custom, namely, that when a caravan of strangers comes into a district, as we had done, the people living there send out emissaries to exchange presents and escort the leaders to the resident chief. I asked him why he had not done this in our case, and whether he was not aware of the fact that the omission of these civilities meant that he regarded our approach as an act of war. These remarks evidently produced some impression upon the elders, who parleyed anxiously with their leader, but the chief re-

mained obstinate. He knew, he said, that strangers were generally treated in the way I had named, but that he had not known of our approach. We laughed, however, and pointed to the barricaded village, and asked him whether in Africa any white men ever moved anywhere without the native people knowing everything about it. To this he replied in a mist of words, and said that, although he was a very big chief, he was not as big as his brother, and that he must consult him. Independent inquiry had shown that the brother did not exist, that this man himself was the great lord of the place, and we again returned to him and said that he was a man of evil words, which meant nothing and were intended to entrap, that he was worse than a pig, that he was a mere louse upon the face of the earth ; that his men were willing to sell us grain, and that we had meat in any quantity, such as his heart loved, and that he must allow his people to sell us grain. He still, however, flatly refused. There was nothing much to be done, but we had a hundred and odd men with us who were without proper food. Grain and other vegetable stuff abounded in the village, the people were only too willing to sell it for the cloth, the beads, the tin whistles, and the penny rattles which delight a native heart ; but their chief was a fat, flabby beast, with a besotted face and bold, protruding blood-shot eyes, who would do nothing but assert his own independence of everybody and everything. We therefore informed him that he could do as he pleased, he could refuse to let the people sell us grain, etc., but in that event he would have to remain where he was till he changed his mind. He stormed and blasphemed, he swore that this, that, and the other would happen, etc., etc. ; but he remained sitting on the hot, stubbly ground ; he remained sitting there until the

camp was pitched and the blue smoke of our fires rose abundantly among the tents. He remained there till the west grew yellow and the day died out, and the evening wind stirred and rustled among the dried bushes and the great euphorbias. He was still sitting late into the night when the camp was all asleep, except the silent sentries, armed and vigilant, who stole stealthily about from point to point. About midnight I woke up. It was clear and chilly; the fires burnt brightly on the ground, and I went out to see how our old ruffian fared. He was seated beside a huge Soudanese soldier, smoking a long pipe, and between long puffs he was talking to the guard, but as the guard did not understand a word he said, they merely smiled, smoking their own pipes, watching him. I asked him if he liked sitting out thus by himself. Whereupon he observed that it was very cold, and then he rubbed his leg, in which I observed there was a great spear wound, not quite healed, and which he said a neighbouring chief had given him in a recent fight. In the intervals of smoking, he covered the open remains of this wound with hot ashes from the fire. I got some antiseptics and lint and fixed up his leg for him. He took everything he could get from us with avidity, but when I suggested that he should now tell his men to sell us what we wanted, he merely spat and said that he would not, and that he would sit on for ever rather, and that we could do as we pleased. I had him informed then that we should start exactly at four a.m., and that unless he allowed his men to sell us food, I should take him with us as our guide and make him carry a load like a common porter. To which he replied that I might do as I pleased. It was really very funny, and I sat up in bed that night, as I have often done in Central Africa,

View of the small glacier between the northern snow ridge of Ingomwimbi and Kanyangogwi from the former, at a height of 13,600 feet.

and literally shook with laughter at what had happened during the day.

When it was time to strike camp, it was still deep night and very cold; we gathered round the bright fires in the clear tropical starlight, making a hasty breakfast of cocoa and fowls, and then the men fell in, the loads were shouldered, and we were off. But behind the great Soudanese soldier who led the way, there walked the chief, with a light load on his head, blaspheming like a Turk.

The march was long and heavy. The sun rose over a vast park-like country, covered with clumps of trees, with euphorbias and acacias, and with yellow sun-scorched grass. There were quantities of game everywhere, but we hurried on, and about noon came to the great Ruchuru itself, a mighty stream of muddy yellow water, as wide as the Thames at Westminster, and whirling in eddies and rapids away to the north. The men went cautiously into it, sinking up to their necks; the cows went next, and then the goats and the sheep were driven and bundled neck and crop into the water. We followed ourselves; the goats were no use whatever in the water, and in a few seconds there was a confused mass of men and animals floundering out in heaps upon the opposite bank. The water was deliciously cool, it was up to my neck, and there was such a strong current, that I had to steady myself with a pole, although we were slanting across down stream. After a few minutes we emerged on the other side drenched from head to foot, beneath a tall bank of slippery, sun-steeped mud. I took off all my clothes, fixed up an umbrella on a stick in the ground and stood up in the wind to dry. Fergusson did the same, and while we were thus pleasantly occupied, Omari came up and said

that the recalcitrant chief absolutely refused to cross the river at any price. I told him to go back and take a rope, and that he and the guard were to haul the old brute over, neck and crop. In a few moments I heard roars of laughter from the river bank, and on going, all naked as I was except for a pith helmet, I saw what looked like an infuriated hippopotamus on the end of a line. It was, as a matter of fact, the chief who was being towed across the stream. Our own men were absolutely wild with delight, and even the chief's elders, now that they saw that their master's attention was otherwise engaged, laughed loud and long. When the chief came to land he was rather full of water, and he rolled about and blasphemed worse than ever, and as we saw no use in taking him any further, we turned him loose to find his own way back across the stream to his own village. His head-men, however, voluntarily accompanied us, and said that we should reach Vichumbi that night. We made a second long march through herds of game which surrounded us in all directions, and were so tame that we could walk right amongst them and look at them. Finally, away to the north, we discerned open water over an endless yellow plain of grass, and on the further edge of a dark-green belt of reeds there showed up at last a village. We moved steadily across the plain, but long before we got to this place there was evidently a great commotion going on in the town; men could be seen hurrying in all directions, and as we drew nearer we could hear a confused shouting proceeding from hundreds of excited people. We had, in fact, surprised the place, and the long dusty trail of a big caravan approaching over the plain had frightened them into a fit. They were tearing wildly to and fro, like an excited swarm of bees, and clambering

into boats, which they pushed across to some islands near the swampy shore of the lake. Fergusson and I hurried on by ourselves, but before we had got into the village there was not a man in the place, but there were crowds of natives, men, women, and children, regarding us from the supposed safety of their island suburbs, and we had, with the help of the friendly elders of the last village, to resort to a prolonged shouting across the creeks. After a long time a good-looking native, with a bald bullet head and a necklace of white ivory, and who was evidently someone of importance, got into a small boat and pushed across. When he drew near we saw that the boat was not like those on Kivu or Tanganyika, or in any of the great lakes we had yet seen, but was a deep punt with a square end and a flat bottom, made out of thin strips of wood, which were sewn together at the joints with laces made out of bark. When the ambassador arrived we gave him a present of bright-coloured cloth, which Omari placed over his shoulders, and after strutting about for some time like a peacock, to the huge delight of the ladies on the opposite bank, he returned to the island suburbs, and told his people that we were all right. In an instant clouds of boats put off from the islands, and after a few minutes there were hundreds of friendly natives in our own camp. They were a good-looking race, especially the women, who wore nothing but very short ballet-dancers' skirts, made out of banana leaves, and tight armlets made of brass wire, and the long black ebony-like hairs out of elephants' tails. They had large luminous eyes, and smoked short terra-cotta pipes, wrong side up, like the fishwives in an English fishing village; but they were much better-looking than any English fishwives that one usually sees, except in pictures. They were simply a fishing

people, and entirely different from the wretched hordes we had encountered upon the plains further south. They brought us loads of grain and fish, chiefly a great chromid, which they sold for cloth or beads or anything that they had not. After a time the real chief presented himself; he was a big, not bad-looking man, with a loud voice and a big jovial laugh.

This then, was Vichumbi, and the great estuary on which it stands was the mouth of the Ruchuru, where it opens into the Albert Edward itself. We were at last among a friendly people; the strain and tension of the last few months was at any rate for a time over, and we could mature our future plans in peace. Later, during the same day, we held a consultation with the chief of the village about our future movements. We had not then finally decided whether to take the east or the west side of the lake, but there were several reasons for adopting the latter. He said, moreover, that if we would wait where we were for a few days and shoot him some meat, of which he was very fond, he would provide us with ten large punts, each capable of carrying twenty men as well as some loads, and that then with these we could proceed up the lake. None of these people seemed to know where Uganda was, or where there was any white man. They had heard of white men to the west, that was in the Congo Free State, and that was all they appeared to know.

Next morning I woke shortly before dawn and got into my bath, which my boy had filled with deep cool water, the first water which I had seen from the Albert Edward Nyanza; and after dressing I went out while it was still starlight and cool, to get down, if I could, to the actual shores of the lake. The grass was wet with dew as I brushed through it to the north, and every now and then

a rat, or some other small mammal, would rustle across the path as if it had been shot from one side to the other. There were a few natives already up and about, moving slowly, bent and chilly, among the blue smoke wreaths which hung among the huts. They looked up as I

The broad glacier on the Northern snow ridge of Ingomwimbi.

passed along to the lake, but were far too cold and frozen, like autumn flies, to pay any attention to me for long. Really, the temperature was exactly 73°. After a short walk I came to a reed belt, and through this led some native paths, which were evidently used by fishermen. Following these I finally came out beyond the reed belt, on to the shores of the lake itself. It was sandy, and

flanked to the west by a long sage-green wall of reeds. The sun was just about to rise, and looking to the north one saw that the lake spread away to a sea horizon, while to the east it died out among absolutely flat reed-covered sandspits. The water, which was perfectly calm and grey, spread itself along the hills which form the western wall of the great valley of the lakes, and in it their inverted images were exactly repeated for some thirty miles

On the beach there were a number of shells, but nothing among them at all comparable to the marine forms which we had encountered on Tanganyika. These shells were identical in kind, and almost identical in their specific representation, with those of Lake Kivu. There were hundreds of *Melania Tuberculata*, *Vivipera*, and *Planorbis;* but there was one addition in the shape of a very Planorboid-looking shell, but which, when examined, was found to be much more solid and heavy than any other *Planorbis* that is known. It subsequently turned out not to be a *Planorbis* at all, but an entirely new form, to which I have given the generic and specific names of *Planorbia Albertensis*. In these few minutes I became, as a matter of fact, quite sure that we should find nothing abnormal or marine in the Albert Edward Nyanza, and although such a conclusion may appear to have been drawn hastily, it proved eventually, as a result of our three weeks' journey on the lake, that the impression was quite correct. It is as true among shells as among other things, that "first impressions are generally the best"; in fact, this old saying is one of the very few of a like kind which I have ever found by experience to have the slightest foundation. After the performance of this preliminary canter on the shores of the lake, I returned to the camp, and although the sun was only a few degrees

above the horizon, his rays were already terribly fierce, and it was evident that we were once more in a very hot country indeed.

Here, as usual, it took longer to work the native oracle with respect to the canoes than we expected. The native mind moves slowly, he is never in a hurry, and when one comes to think of it, there were many reasons why he should not be anxious to bestir himself; for we were shooting him abundance of his beloved meat every day. Finally, however, the chief produced his boats, and after a great noise, which began at daybreak and lasted till noon, with "a great shout and a cry within" the village, we got the loads safely stowed and were off. It was found, however, that it would be impossible to transport the whole expedition in the boats, and so we had again to arrange with Omari that he and the cows and a number of the men with the loads should go round by land.

CHAPTER XVIII.

"I shook him well from side to side until his face was blue,
'Come, tell me how you live,' I cried, 'and what it is you do.'
He said, 'I hunt for haddocks' eyes, among the heather bright,
And work them into waistcoat buttons in the silent night.'"
—LEWIS CARROL.

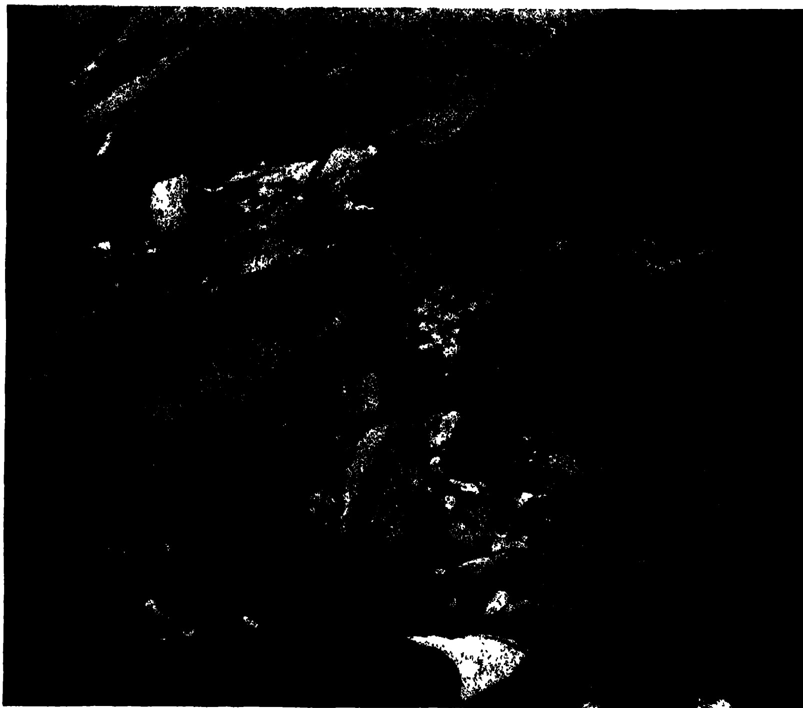
As we put out over the open water of the Albert Edward we could see the great ranges of the west coast gradually opening up ridge behind ridge and cape beyond cape, as far as the eye could see, and as we punted along it soon became obvious that we should run completely out of the swamp belts of the southern shores, and that we should once more be travelling along one of those steep precipitous coast-lines which almost invariably characterise the coasts of the great Central African trough. Near at hand, upon the open opaque waters of the lake, there were many pelicans, some idly floating, some solemnly regarding us, and now and then we passed a large fish, not dead, but which was struggling aimlessly, and lying on the surface of the water. The natives constantly speared these fish, and when they were brought into the boat we noticed that they had invariably lost, quite recently, either one or both of their eyes. Enquiry among our native boatmen elicited the reply that it was the pelicans that did this, or at any rate some fishing bird, which preferred the eyes to any other part of the fish,

and, having abstracted one or both, were in the habit of throwing their hapless and helpless prey on one side. Later on during the same day we saw any number of these maimed fishes, and what was more, any number of natives, some in boats, some balanced on floating logs, waiting, spear in hand, for a mutilated fish to pass. About noon we reached a village upon the west shore of the lake, and from this place rather to our surprise we found a path, broader and better than those which natives usually make, and at the end of this road there was a clear space and a flagstaff and a bungalow; it was, in fact, a station which had been built at some time and had been abandoned by the Congo troops. We pitched our camp here, and the chief who had led us to it told me, in reply to further enquiries which I made concerning the strange fishing operations which I had seen in the morning, that the fish which we had observed was the only one that inhabited that part of the lake; and further, that the natives used no nets or hooks or traps, and that for their fish they trusted exclusively to those which had already had their eyes abstracted by birds. I did not believe half that he said at the time, but during our subsequent stay upon the lake I never saw any other fish in this part of it, nor did we see the people catching fish in any other way, nor were there any bones or remains of other fish to be found lying about. Further north on the same lake, and particularly near the Semliki source, there are, of course, abundant *Protopterus*, and the natives made a regular business of trapping these remarkable fish, which often attained a length of eight feet, in runs and trapped lagoons. In the same way there are also no crocodiles or hippopotami, either in the Ruchuru or in the Albert Edward Lake, at the south, although they appear at the north end of the lake, and are

abundant in the Semliki river and in the Albert Nyanza itself.

The many days which we spent upon the Albert Edward were a repetition of this first. We rose at dawn, had breakfast, and then got into the boats, in which we rolled and sweltered till noon, when we found some place under the frowning hills of the western shore to land and have lunch; then we again got into the boats, and sweltered and rolled till it was time to camp and we could find a place on which to pitch the tents. Sometimes the scenery was strangely beautiful, but it was always steamy and intensely hot. We would pass rocky shores, crowned with dark forest and bushes, and on the blazing rocks there were often most gorgeous coloured chameleons, who watched us intently as we approached, turning slowly every colour under the sun, until they went black with rage as we passed close by. We made slow progress, and it was many days before we came to the north-west angle of the lake. At this place we found a detachment of native Congo troops, and we saw that the great western wall of the valley, in which we had been travelling for so many months, was now standing and striding away from the northern shore of the lake, and pursuing its course still unmoved towards the north. Looking to the east, we could see endless storm-clouds, and endless low sweltering coast-lines stretching away in that direction to infinity through dancing summer goose. Behind these again there were hills of moderate dimensions, but where in the world was Ruwenzori? We ought, according to our maps, to have been within thirty miles of the great white peaks of this range, and we had anticipated that they would now have stood up before us like the long white fringe of the Alps, as seen from the plains north of Turin. They were, however, nowhere to be seen.

On returning from the Belgian outpost, which was perhaps a thousand yards from the shore, I thought, however, that through a rent in the storm-clouds to the north, I saw dimly and for an instant the silent impressive form of a great white peak, but I was not sure. Next



A nearer view of the men sitting on the ice.

day brought no change; the sky was blue and clear, but as we again proceeded to punt and to perspire along the fringe of swamps that border the northern shore of the lake, we could see nothing away to the north except a few low hills, perhaps twelve miles away. Eventually during the day we passed a promontory of low reed-covered swampy

ground, on which there were hundreds of white pelicans, standing in all attitudes, and blowing out the bladdery expansion of their throats like balloons. The land hereabout opened back into a great V to the north, and over this extension of the lake the lollopping waves seemed to race in an unnatural manner as if they were spurred on from underneath. Such was indeed the case; the V was the opening of the outlet of the great lake, and the unnatural waves were produced by the outflow of the Semliki at its source. Beyond this great effluent the coast again closed in to the north as a profound swamp—a swamp indeed in which all the attributes that go to the making up of a tropical morass appeared to have become accentuated. There were low beaches of yellow sand, over which the surf broke in endless lines of foam, and beyond these, reeds and trees, trees standing in clumps, trees fallen this way and that, and trees half submerged in still pools of gleaming water, which stretched away among their rotting stems. There were trees that had been swamped out and died where they stood by hundreds, with all their limbs rotted off in the intense damp heat, that filled the whole place with an overpowering sense of depression, and with the faint rotting stench of an equatorial swamp. These marshes seemed utterly deserted, except by crowds of birds, of pelicans, and water-fowl, and the eternal fish eagle, with its wild melancholy voice.

After travelling in this way for two days, through endless sheets of water and morass, where it was often impossible to tell where the swamp ended and the lake began, the coast once more bent to the south, and we were, so the natives said, now within one day's journey of Fort George, an old station formed some years before by General Lugard, and at noon we pulled up for

lunch. Fergusson, however, said he would not have any, he was shaking from head to foot, and although the sun was blazing above the hot beach and the warm water of the lake, and the temperature of the air was probably about 100°, he continued to shiver with cold, although we wrapped him up in three blankets and a shawl. We decided that it would be better to go on, for the place where we were, from a sanitary point of view, was atrocious. When we put out, however, we found that the wind had risen, and as we went along it still rose; the waves had become great slapping seas, through which the afternoon sun shone brilliantly green as they raced towards the shore. We had great difficulty in getting round several points, and finally, in an exposed horse-shoe bay, one of the smaller boats suddenly capsized. We could see the men in the water, some swimming, some standing up to their necks and jumping like the bathers on an English beach, every time a wave came. We were obliged to put in to shore and wait till the boat had been righted and all the loads it contained were safe; and all this time Fergusson had to sit upon the sand of the dismal stinking swamp, shaking from head to foot, and trying to squeeze himself up among the reeds, out of the way of the spray, which was being driven over the beach by a roaring wind. I tried to force a way through the reeds and mimosa bushes which fringed the shores, but they were endless and impenetrable, while in every direction deep muddy reaches of stinking water, surrounded by shaking muddy quicksands, opened up landward only a few feet beyond the actual lake. We were therefore obliged to push on as soon as the unfortunate boat and the swamped loads had been secured, and were rolled and battered about for two more hours, before we took a sharp

bend to the north. The strong south wind had now completely died away, but a wild storm of black clouds came sweeping over the plains from the opposite direction, which we could see sloping very gradually away from the shore to the north; another wind came also before it in that direction and raised clouds of sand and dust, off the inland steppes. Vivid lightning and thunder followed, and then a splashing deluge of rain which lasted till nearly sunset, when we found ourselves suddenly, as if it had been through the result of some conjuring trick, in a land-locked bay punting over deep still water, in which the great sun-struck storm-clouds and the opposite coast were reflected, and absolutely at rest. On the other side of this strange land-locked bay and perched on a bare yellow ridge facing us stood the long-sought fort, and as the sun set we landed on a beach, beneath a ridge of arid ground that turned out to be about two hundred feet in height. When we landed Fergusson could hardly stand, and I hurried up towards the fort, as I had already seen that there were some black troops in uniform coming to meet us from above. They turned out to be a small detachment of the Uganda Rifles in charge of a huge Soudanese sergeant, who asked me curiously who I was, and where we had come from. I sent these men down to the boat with Aden, so that they could carry Fergusson up to the fort, and went on myself to see where we could camp or sleep. The troopers informed me that the tents had better not be pitched, as the wind blew every night with great force, and they said that there was plenty of room for us to sleep inside the buildings of the fort.

From the top of the ridge I got a view of the surrounding country, and I found that we had arrived in the most extraordinary-looking place which I had ever seen. The

fort is built upon a narrow neck of land, which stretches between the Albert Edward on one side and a strange still basin of dark red water on the other. The ground upon the ridge and upon the coasts of this weird red lake was dry and desert-like, and composed of some queer light yellow and stratified material; and beyond, the whole landscape to the north was utterly barren and yellow as

In a Papyrus swamp.

far as the eye could see. On the coast of the Albert Edward itself, and at a few places inland, there were dark green patches of euphorbia trees, but beyond these the whole landscape inland was composed of a succession of yellow crumbling ridges, flats, and plains, and was absolutely desert.

When I returned to Fergusson I found that he was very ill, his temperature being 105°, and he was obviously in for

another bout of fever, and this made me doubly anxious to get into communication with the nearest out-post, or the nearest white resident of the Uganda Protectorate. The troops informed me that Captain Meldon, who was in command at Toro, was at this particular time shooting only some fourteen miles away to the north; they said however he was returning on the five days' march to Toro next day at daybreak. I therefore decided to go that night and ascertain what could be done. The great Soudanese sergeant was very unwilling that I should set out in the dark; he said the road was very bad, that it was full of holes and elephants, and that if we did not break our own necks, the elephants would certainly do it for us. I was determined to go, however, and four of the garrison briskly shouldered their arms and accompanied our men as guides. We passed out of the gates of the fort, and then descended over very rough ground, and eventually over the plains which extend to the north. The dark shut all up from view, and we plodded on hour after hour, through sandy patches of dry rustling grass, and beneath strange dark ridges and hillocks, that every now and then rose over us among the stars. The night was red-hot, absolutely still, and almost absolutely dark. Two or three times some big thing rustled up in the dry grass, and then crashed away from the line of march, and after two or three hours we passed a great white gleaming sheet that stretched below us, and which I had naturally thought was water, but the soldiers said it was only salt. After this the great plains again shut us in for two or three hours in absolute gloom. The path went this way and that, and I became fearfully sleepy, so sleepy, indeed, that I actually fell asleep while I walked, and fell flat upon my face time after time. In the end, water, real water, did actually appear, and we finally crept

and crawled round the basin of a lake which was about a mile across. On the other side of this basin we came at last in sight of fires, and walked suddenly into a European camp. The owner woke up at the sentry's challenge, and I heard an English voice, and hailed him from without. He lit a candle, and we looked at each other, and I explained whence I had come, and on what I was bent. It was the "skrike of dawn" on the 15th March, 1900, and I asked him if he had heard any news from Europe since the autumn of 1899. It was only then, and in this odd place and at this odd time, that I first heard of the outbreak of the great war in the same continent away to the south.

Papyrus heads.

CHAPTER XIX.

"Though thou shouldst bray a fool in a mortar among wheat with a pestle, yet will not his foolishness depart from him."—*Proverbs.*

WHEN the sun rose and my tent was pitched. and I had heard all the news that could be crammed into our strange talk in the early morning dusk, I stepped out into my new surroundings. We were in a great plain, over which to the east lay the gleaming waters of Lake Ruisamba, which is a huge northern extension of the Albert Edward Nyanza. Upon the west the plain was bounded by a long range of hills, or rather mountains, for it soon became apparent as I looked at them that these dry ridges that rose one behind another about ten miles away reached a height of eight or ten thousand feet. They were, in fact, the outer barrier of the great Ruwenzori range itself, and the still invisible snow-peaks of these Mountains of the Moon lay, Captain Meldon told me, immediately behind them, and were visible at one or two points on the route to Fort Jerry, through gaps in the outer ramparts of the range. I heard from him that no one had learned any more about these mysterious mountains recently, or indeed since Mr. Scott Elliot had visited them in 1895. Mr. Bagge, the civil officer at Toro, had indeed made an excursion recently up the Nyamwamba Valley, but had turned back at the bamboo zone. He would, however, be probably able to give me some valuable information

about the routes by which it was easiest to approach the range.

I slept most of the day, and next morning returned to Fergusson at Fort George. He had recovered during the day I had been away, but on the morning of my return

A native path on the way to the Albert Nyanza.

the fever also returned with great force, and in the afternoon he became very ill indeed, his temperature having reached 106·5°. With a temperature of this sort gentle methods are absurd, and we immediately proceeded to sponge him with the coldest water we could get. The doors and windows of the room which we occupied in the fort were wide open, and a strong fresh breeze was blow-

ing, and in this we literally as it were set him aside to cool. Towards evening his temperature was coming down, and he finally, to my immense relief, broke into the profuse perspiration which always marks the departure of this wretched African disease.

Now that I had actually located the Ruwenzori ridges, they could be traced from where we were at Fort George as a succession of long spurs and slopes, which began at or near the shores of the Albert Edward itself, and then gradually rose one behind another, until the higher and more remote portions to the north were shut out from view by the nearer rising ground.

In two more days Fergusson had sufficiently recovered to be moved in a hammock slung on a pole, and we set out slowly in the direction of Fort Jerry. The strange desert-like plains which characterise the districts of Catwe and Fort George are entirely composed of volcanic ash and volcanic débris of different sorts. The curious red salt lake and numerous other circular depressions like it, which are scattered all over the plains, sometimes filled with water, sometimes floored with sheets of salt and mud, are merely so many volcanic craters. This kind of country extends from the south-west of the Ruwenzori ranges all round the shores of Lake Ruisamba, and as far to the east as the long wall which shuts in the great valley of the lakes on that side. This wall itself forms in reality the edge of the Victoria Nyanza plateau, and it runs a little to the north of Catwe actually up against the steep slopes of the outlying ramparts of the Mountains of the Moon along their eastern face. We were now fairly on the way towards these mountains, and the journey began to be of the most intense and ever-increasing interest as we went along. It may be remembered that the Mountains of the

Moon were discovered by Stanley, although they had really been seen, but their nature not comprehended, by Baker, when he spoke of the "Blue Mountains" to the south of the Albert Nyanza. Stairs, during Stanley's Emin relief expedition, had ascended one of the northern masses to a height of ten thousand feet, and, from what he there saw of the range, had come to the conclusion that

Camping ground near the Albert Nyanza.

the different snow-peaks and ridges were simply so many denuded fragments of the rim of a vast volcanic cone. Still later Stuhlmann, when with Emin Pasha, had obtained a magnificent series of views and photographs of some of these snow-peaks, from the west side of the range, that is from the Semliki valley. He had further made a desperate attempt to get up to the snow-line, but had found himself obliged to descend after reaching an altitude

of twelve thousand feet. He appears to have been on a ridge which overlooked an inner valley with a lake at the bottom of it, and this separated him from the snow. Stuhlmann saw no glaciers on the west side of the mountains during his journey, and seemed to favour the view that there were no glaciers on the mountains at all.

In 1895 Scott Elliot made a much more extensive examination of these mountains, and traversed all along the east side from Kassigama's to their southern extremities. From this point he turned west and north, and reached the same places which Stuhlmann had reached previously. On the east he ascended the Wimi, Mobuko, and Nyamwamba Valleys, but, owing to his ill-health, did not succeed in reaching the actual snow-line at any point. Nor did he demonstrate the existence of glaciers on any portions of the ranges which he visited. From his observations upon the Mobuko Valley, however, he came to the conclusion that at some former time ice had probably descended over some portions of it which he reached. There were therefore several matters of considerable geographical importance to be decided when I reached these mountains in the early spring of 1900. We did not know whether these huge mountain masses were remarkable in not possessing any glaciers, or, if they did possess them, what the character of these glaciers might be. We did not know, indeed, at what height the snow-line really existed, as no one had actually reached it, and, as I quickly found, our whole appreciation of the range had been obscured and befogged by the persistent and erroneous use by different travellers and geographical compilers of the terms Mount Ruwenzori and Ruwenzori in the singular, as if there was in reality one great mountain mass, whereas we are here dealing as a matter of fact

with a massive range, as long and quite as lofty as that portion of the Alps which stretches between Mont Blanc and the St. Gothard Pass.

During our marches to Fort Jerry the mountains to the west gradually rose in height, and appeared as ridges which were persistently shrouded above in heavy cloud,

Euphorbia and bush clump near the Albert Nyanza.

but after we had crossed the Nyamwamba, a river which flows from the mountains eastward into Lake Ruisamba, the persistent rain-storms lifted somewhat on the heights in the afternoon, and here, for the first time, we caught a succession of glimpses of huge and rugged mountain masses, which towered in black precipices one behind another through the mist and rain. We could, however,

see nothing of the snowy peaks, and towards evening the clouds shut down again over the nearer spurs, which we could now see were densely forest-covered. The persistence of heavy rain upon the mountains was extraordinary, and I thought it boded ill for the attempt I meant to make to reach the higher peaks. In two more days, however, we reached Fort Jerry, and Mr. Bagge was kind enough to lend me eventually one of his head boys, who was a native of Toro, and could speak the language of the hill tribes, and who had accompanied Mr. Bagge when he had explored the Nyamwamba Valley as far as the bamboo zone. He had done, in fact, more than this; for after his master descended, the boy had gone on by himself as far as the heath zone, some tufts of which he had brought back. The story which he told of this solitary excursion was curious and amusing. He said that the climb was not at all one for any white man like me, and that after he left Mr. Bagge he climbed through the bamboos till he came to the heath, and finally got into a great amphitheatre of snowy mountains, with a lake at the bottom of it, beside which he rested, and then returned. Round the lake he said there were standing a number of great black birds which were bigger than sheep and bellowed like bulls. He said further that he did not think the ascent of any of the mountains near the lake would present much difficulty, as the tangle of heath ended by its shore, and after that there was nothing but slopes of rock and stone.

I therefore decided to explore the Nyamwamba Valley and the mountains which were associated with it. For this journey I took twenty of our Ujiji men, with Omari Kidogo and the Nyassa cook. I took enough preserved provisions of various sorts to last a fortnight, and about two and a half loads of rice. The men took two small patrol tents,

and I had also my ordinary tent, six blankets, some flannel shirts, a tarpaulin jacket and hat, one pair of ordinary nailed boots and one of indiarubber sea boots. For the men's food in case of emergency I took three live goats and a sheep from Fort Jerry, and we bought five more goats on the road. It will thus be seen that the party was self-contained, and so long as we could get water, we were quite prepared for a month or more. This, I believe, is the great secret of success on all high mountains of this sort, where roads are not, and the party may be more than a week cutting their way through the forest to a point from which any general study of the mountains can be made. The morning on which I intended to have left Fort Jerry was beautifully cool and clear, but Mr. Bagge's boy now complained of fever, and as we were not sure whether he was shamming or not, I gave him a gramme of acid quinine well mixed in a tumbler of water, and I told him if he did not get better, we should repeat the dose at breakfast time, but long before this he said he could start. He seemed unable to walk, however, and I finally camped on the Catwe road, not five miles from the fort. During the night it rained heavily, and day broke in a wild thunderstorm, with torrents of rain. This delayed our start till ten a.m., when we made a move. We passed through clumps of elephant grass in a fine cold drizzle, and later on left the ordinary path and struck south-west towards the mountains and the village of Butanuka. The track lay over very hilly country, which was covered with extensive patches of immense elephant grass, through which we had to bore our way half a mile at a time. The breathless mid-day heat in these tall grass patches is fearful, but about two o'clock the sky became again cloudy and ominous, and finally in the afternoon another deluge of

rain came on. In the tall dripping grass we were wet through in an instant, and reached the village, which stands on an exposed hill, in a miserably drenched and cold condition. We were now at a height of seven thousand feet, and the cold, clear evening wind, which blew off the mountains after the rain, cut the porters like a knife. The village was in possession of a very wrinkled and genial old native lady, who was clad in a great bark-cloth and brass bangles, and wore earrings about four and a half inches in diameter. She had dry firewood, eggs and milk brought for me, for which I gave her some cloth and beads.

Next morning we started south along some grassy down-like spurs towards the Wimi river, which about nine a.m. proclaimed itself by a great roaring proceeding from a deep ravine. The path led to a supposed crossing, but when we descended the steep dip into the river bed we found it a brown, broad, leaping torrent, grinding invisible rocks in its bed like millstones, and quite impassable. It was most important, however, not to waste time, and as there were clumps of tall trees standing by the river a little further to the west, we cut our way to these through some very thick elephant grass and scrub, reaching at last some of the trees, which were acacias, on the north bank. I got the men to fell the largest of these, a tree about ninety feet in height, and let it fall across the stream, in the hope that I might be able to send a boy over on the branches with a rope. Big as it was, however, and only half cut through when it bent gracefully over into the water, directly it dipped into it the fierce current swept it away, with a succession of sharp cracks, and it disappeared down the stream like a cork. I tried another, and yet another, all with a like result. I therefore

collected the men together again, and decided to march round to the east, and to try the lower ford on the road to Catwe, about seven miles from where we were. Mr. Bagge's boy, however, informed me that after the heavy rain it would probably be worse. We reached the river

The East shore of the Albert Nyanza.

again about two p.m., and as we approached the ford, we found several natives waiting to cross to the other side. Here fortunately, just above the road, there are two great rocks jutting out into the stream on either side; and by felling trees we eventually reached one of these, and then threw poles across to the other. The river leapt between, some sixteen yards wide, in a swift cataract; and

it was by no means pleasant watching the first man cross, for the poles could naturally not be fixed on the opposite bank. By this means we finally got over the river and camped just as the sun was setting on the plain, above the cutting in which this portion of the river runs.

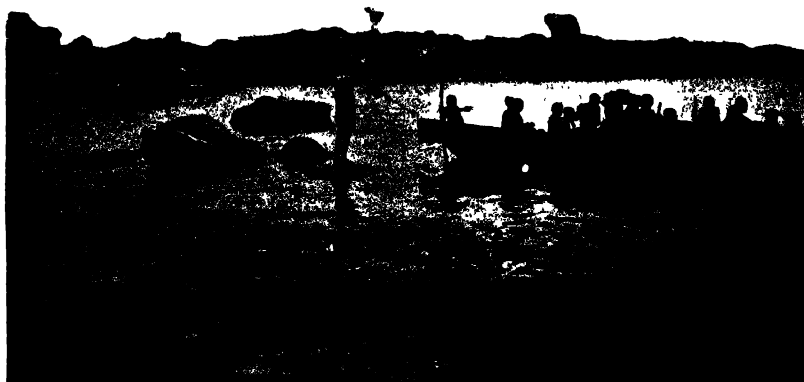
We were now once more back upon the dry grass steppes of the Albert Edward Nyanza. The air was warm and limp and full of mosquitoes, and away to the west, over the flat bed of the Mobuko river, which could now be seen extending far into the hills, the great range rose in an endless succession of dark forest-clad spurs, up into a heavy canopy of clouds above. The valleys of the Wimi and the Mobuko are here almost confluent, and that of the latter continues the yellow plain in a great V-shaped indentation, which reaches up to the beginning of the higher slopes.

Next morning broke clear and cloudless; the grass about the tent was drenched with dew, and there at last, away in the west, just before the sun rose behind me, hung the long line of snow peaks, every crag and detail brilliant and sunlit, above the still shadowed lower portions of the earth. As the sun rose the details became clearer, and I noticed below the snow on the different summits a curious orange band, which was evidently the "brown line of rocks" noticed by Stanley when he viewed the heights from the Semliki valley on the other side of the range.

The view of the mountains from this point in the early mysterious light of the morning was more beautiful than any I have ever seen. All round us lay the vast yellow plain, covered with grass and dew and pinkish sand, and forming a dull golden foreground to the purple forest of the nearer hills. Further away again there rose the higher forests in tier upon tier of paling blue; and over these the white snow-fields, so lonely and clear and cold that one

seemed to suddenly look out of the sweltering barbarism of the tropics altogether and into a totally different world.

Besides its marvellous beauty, this extended view of the great range was of the utmost importance during the latter part of our explorations, as it gave me an opportunity of



A rocky harbour among the islands on the Victoria Nyanza.

making a rapid sketch of the various snow peaks and the different mountain masses; thus fixing their relative positions, so that I was subsequently able to identify my position at various points within the range. It was, moreover, of further importance, as it at once dismissed from my mind the last remnant of any idea that Ruwenzori

could be considered as a single mountain mass. Before us lay an extensive mountain range, which looked as vast and formidable, and composed of as many different elemental peaks, as does the Alps from some of the Italian plains to the south. From the spot where we stood one could see some seventy-five miles of the range, and in this length there were at least four groups of distinct and individual snowy peaks. It will be remembered that Stuhlmann, when viewing the range at a distance from the west, described the various snow-peaks which he saw under the names of his different scientific friends; and it may further be remembered that these peaks were associated together by him in four distinct groups. There was the southern group of mountains, immediately round the lofty snow-peak of Moebius; a little to the north there were the great snowy heights round Ingomwimbi; further to the north again appeared the lofty snow-cap of Kanyangogwi and its associates, and still further to the north appeared the lofty mass which has generally been known as Saddle Mountain.

From where I stood now, on the eastern side of the range, the mountains again arranged themselves into these four groups; and there can be no doubt, as the frontispiece and the sketch on page 267 will show, when compared with Stuhlmann's figures, that we were both viewing the same series of mountains from opposite sides of the range, and from positions about seventy-five miles apart.

At the same time it became equally obvious to me that the exploration of this range, from a mountaineering point of view, is a task which, in all probability, unless some one devotes his life to it, will not be completed for a great number of years; and it was also at once made evident that to talk of ascending Ruwenzori was as absurd, as absolutely stupid in fact, as if one were to talk of ascend-

ing *the Alp.* Nor can anyone as yet make any even approximate guess as to which of the many sublime snow-peaks which we could see from this point will, in after years, when some of them have been ascended and their distances from one another ascertained, in reality turn out to be the highest. As we shall see later, I, personally, do not think that any of the peaks are as high as they have been supposed to be; but to talk about them being twenty thousand feet, or any other definite height, as Major Gibbons did recently, is obviously a piece of nonsense; and especially so for a traveller who, as he says himself, was never within forty miles of the snow at all.

CHAPTER XX.

> "The sun looked over the mountain's rim:
> And straight was a path of gold for him,
> And the need of a world of men for me."
>
> —BROWNING.

FROM our camp beside the Wimi river, after a short early march, in a curious light, half made up from the setting moon, half from the rising day, we reached the Mobuko river, and, to our consternation, found it in flood, like the Wimi, only, if possible, more impassable still. We had thus lost one entire day, and seemed likely to lose another, in trying to get across these rivers to the place from which we originally intended to have made a start for the central core of the range. The Mobuko, or rather the valley in which it flows, winds itself, however, far back into the mountains, and the superb view which we had seen in the early morning had really been obtained through the cleft in the outer rampart of hills through which the river runs. This valley itself, therefore, offered a good means of approach to the higher ranges, and I find it has already attracted the attention of other explorers; for it will be found that Mr. Scott Elliot remarks in his book that Captain (now General) Lugard had mentioned it to him as being probably one of the best ways to reach the snow. I therefore determined to change our route and try this valley forthwith. Having called the men together, I struck

straight across the dry plain towards the gap in the hills from which the river emerges. It was a hot, rough march, especially after we reached the foothills, the valley narrowing into the form of a wide, flat-bottomed trough, floored by tall elephant grass, spear grass, thorn trees, and dense

Another view of the rocky coast.

scrub, among which the beautiful scarlet Kaffir bloom was conspicuous all the way.

After a halt I found the path along the floor of this valley so terribly hot, buried as we were among the immense grass, that I struck out on to the steep hill on the north side with one boy, leaving the men to come more slowly along the flat. We marched here for some time rather moodily on, as there was nothing to be seen of the mountains, but the boy pulled me suddenly by the sleeve

and whispered, "Tembo!" (elephants). They were close to us on the floor of the valley, plodding leisurely through the grass about eighty yards off. I had nothing with me but my Lee-Enfield sporting rifle and expanding bullets, so that it would have been useless to fire at them from the hillside. The herd moved slowly into a small open space, twenty-two in all, some very fine beasts among them, and rested a moment, waving their trunks, and flapping their great ears to keep away the flies. Then they began to trumpet and moved off again, making a broad track through the scrub and grass. They now crossed the valley, and in a few minutes forded the river, disappearing among the grass and trees on the other side. Hardly had they gone when another herd of fourteen came slowly down the same track, stopped a moment in the same clear space, and, after trumpeting loudly, passed away in like manner across the river out of sight.

About an hour later we struck a path, and towards evening we came to a small village near the river, where the chief gave me a fat-tailed sheep, and accompanied us to a larger village just at the mouth of a great gorge, where the valley finally enters into the higher ranges. We were all very tired, and I was extremely grateful to an ugly old man who brought a great bowl of fresh goat's milk to the tent. I think I must have drunk more than a gallon of it, and, after a bathe, went out to see where we were Ascending a small spur, I found that directly in front of me the valley appeared to be almost closed by the huge tooth-like mountain which guards the entrance to it and rises above the forest in bare, black, absolutely perpendicular precipices to a height of about thirteen thousand feet, and a little to the south of this, and just visible between it and the southern shoulder of the valley, there was a solitary snow-

peak, wild and jagged enough to raise doubts in the mind of any climber. It appeared to be about four miles to the west.

On the following morning we left the camp about seven o'clock and pushed rapidly up the valley, crossing the still flooded and ice-cold river twice, until we rounded the shoulder on the southern side. Once round this, we entered the mountain region proper; ridge after ridge rose steeply to the north and immediately to our left, clothed with dense forest and from which there protruded heavy masses of bare rock. Immediately in front of us, and entirely blocking the view up the valley, there was a steep forest-clad spur, which we ascended, and, after a very stiff climb of about one thousand feet, came out on the top. On the narrow summit there was a sort of meadow, covered with soft grass and yellow and pink ground orchids, and a few huts were grouped among the trees; and also, coming almost immediately on the opposite face of the ridge, there opened out before us one of the most superb panoramic views of great mountains I have ever seen. The north-western face of the ridge on which we stood fell about one thousand five hundred feet precipitately into the river, and commanded about four miles of its deep valley; and round this, forming as it were an immense natural amphitheatre, there rose some thirty huge mountain masses, which frowned down on the white foaming torrent in an absolutely bewildering array of solemn cloud-flecked precipices.

The natives in the little village on the ridge were a friendly, primitive people, who bartered peas and beans eagerly for cloth. I made friends with the headman, and finally got him to agree to go with me to the snow-line, together with fifteen of his men. This was a great score, as the mountain people are used to the cold, and, further,

they know certain paths which lead a long way up the mountains, and are used by them while trapping the hyrax, out of which they make their great fur coats.

As we lay talking to them, the chief told us that no one could get up to the snow, that beyond a certain height the mountains were full of devils, and that as the traveller approached the snow-line, the "white stuff" continually changed its place.

After extracting in this manner what trustworthy information I could from the people, I decided that the chief and ten men from the village should accompany us, while Taratibu and five Swahilis remained in the camp.

The little plateau on the top of the ridge where we now encamped was deliciously cool after the glaring heat of the lower plains, and I sat, till long after the sun had set, watching the endless changes of colour which swept over the mountains, as the daylight died out and that of the moon increased. As it became late it also grew colder, and one of the strange phenomena of the mountains began to manifest itself. As I sat I heard in different directions a faint roaring, a murmur like that of a distant sea, which gradually increased until it proclaimed itself near at hand as a mighty rushing wind; it was a wind however which was not distributed everywhere, but which blew, so to speak, in patches, always descending from the upper forest-clad slopes, and roaring away lower and lower down the deep wooded cañons until it disappeared. Again and again the faint murmur would become audible, high up on some lonely summit; and the descending current would gradually fall, wailing and moaning through the trees, like a weird voice, until it finally toppled into the limp hot valleys below. These strange gusts were, in fact, the air which had become cooled in contact with the peaks, and

was now falling in dense masses into the lower and warmer world of the plains.

Next morning we started for the upper part of the valley, taking with us two loads of rice, my own provisions (one load), instruments, blankets, clothes, etc., and two very small tents belonging to the porters. One of these was for myself, and the other for the Swahilis, Omari, and the cook. We also drove up five goats and a sheep. The way taken led down a steep descent of about one thousand feet into a bed of a southern tributary of the river, which we crossed, and then began to ascend along the great gorge of the river itself. The gradient was steep, but the bush and forest not thick, and after about three hours we rested on an overhanging rock perched on the edge of the gorge, which here fell some one thousand five hundred feet sheer into the torrent below. The forest became now more or less diversified with bamboos in patches, and soon after lunch we entered a very thick grove, beneath which the ground was black and boggy. After a time the blackness and the bogginess of the ground became more and more pronounced, and we finally sank up to our knees among moss, ferns, and brambles, which straggled beneath the bamboos. To add to the general discomfort, clouds now gathered round us, the mist was damp and chilly, and finally rain fell in torrents. We were evidently getting to a considerable height, for it was now quite easy to march in a coat with a tarpaulin jacket over that, and about three o'clock we reached another great overhanging mass of schist, under which we took shelter from the rain. Immediately beneath the rock the ground was dry and dusty for the space of about three feet. The men were shaking with cold, and we lighted fires and pipes, for the temperature under the rock was only just 40°, and whenever

the wind stirred among the tall wet bamboos, which shut us in like a fence, the half-naked Swahilis crowded round the blaze miserably. The natives of the mountain village were much hardier, but all appeared to be wretchedly cold and wet. About 3.30 p.m. the rain cleared, and I should have liked to have gone on, but all the men declared that they had had more than enough of it for one day, so I let them stay where they were, and formed an early camp.

It was a curious place, completely shut in among the tall drenched bamboos, and from which no view was possible. I therefore climbed round the rock, and finally got out on the top of it. From this point of vantage I could see the great thunder-clouds slowly rising off the dark green slopes that surrounded the valley, and disclosing the deep purple sides of the central masses towards which we were making. As they lifted, some brilliant streaks of snow appeared above the forests on one of the central peaks, and I was again wretchedly misled, as I found out afterwards, by our apparent proximity to this ridge, which appeared to rise immediately in front. Light wreaths of mist and finer blue vapour lay about the valley and the forest-clad slopes, in the same way that they do at home on a wet October evening, and the air felt similarly frosty and cold and damp. As the thunder clouds dispersed, one could make out more of the surrounding heights. There was a wild rocky tooth over the forest to the left, so sharp and steep that neither trees nor snow lay upon its savage summit, which must have reached a height of fourteen thousand feet. This tooth-like spike, and the great mountain masses which lay to the south of it, were separated from the central masses, which now lay immediately in front of us, by a deep cleft, running east and west, the bottom of which seemed to lie at about the same level as the rock on which we stood,

while to the north of the central mass of mountains there was another cleft or pass separating them from the northern snowy summits. This was not so deep, and both passes terminated towards us in a sort of expanded meadow two or three miles long and about three miles broad, which was

Sunrise and departing storm-clouds on the Victoria Nyanza. From an island in the lake.

covered with moss, heath, and bushes, and lay immediately in front of us.

We had thus a choice of two routes, one to the north and one to the south of the central masses, and as the sun set I held a consultation with the old chief as to which would be the best road to take. We finally decided for that to the north, as it appeared to be higher, and returned to the shelter of the rock.

Next morning I awoke cold and stiff in spite of the

blankets, and we set off towards the meadow. We dipped slightly down, and the ground became more and more boggy as we went, small streams trickling between the moss and bramble roots, and the hollow places being filled up with masses of cold wet sphagnum, often very deep. On the brambles there were delicious blackberries, and among the thorns there now appeared numerous heath trees, often of immense size and sometimes sixty feet or more in height. The meadow was also flooded with warm sunshine, and ablaze with many kinds of brilliant flowers. After blundering through this bog for about two hours, we at last reached the foot of one of the central mountains, which rose abruptly from the meadow in great brownish precipices of micaceous schist, unscaleable in most places, and carrying high up on its wild face, in cracks and ledges, patches of dark heath and red and green thorns. To the north, however, at the base of the cleft between this central mountain and those to the north, which we had seen from our last camp, we found the course of an old torrent which had at some former time swept down into the meadow under an immense overhanging face of gneiss. The course of this torrent was now dry, and we found it possible to ascend, creeping under the great cliff, which hung over the channel for more than fifty feet. The channel was dry and dusty, and so exceedingly steep that it was with the greatest difficulty that the loads were got up at all, and finally the sheep had to be pulled up neck and crop with a rope. I was determined, however, that everything should go up, as I felt sure that the snow was further to the west than we had supposed. Beyond the first pitch of this ascent it was necessary to traverse out along the face of the cliff a short distance to the north, and here we crossed probably the same stream which had at some former time made the

channel below. Beyond this the final climb into the base of the upper valley was very wet and steep, and finally we got out on to the flat ground which forms the base of the cleft we had seen the night before. We were now completely in the heath zone; the bamboos had disappeared, and the whole of this upper region was clothed in a dense

The wreck of our dhow on the Victoria Nyanza.

forest of moss-draped heath trees, between which there were patches of yellow sphagnum and other kinds of different coloured moss. The great trunks and branches of these trees lay as they had fallen for centuries, this way and that—some rotten, some sound—and they were piled up for thirty or forty feet above the actual ground below. Betwixt and between their sharp twisted limbs moss of

every kind had grown, filling all up into what looked like a long-forgotten graveyard which was surrounded by the heath forest, which still stood; and this, with its black foliage and long grey waving beards of moss, added materially to the unearthly appearance of the scene. It was a terrible place, for every step had to be taken at random among the moss and rotten stems, and men and loads were continually disappearing with a yell and a crash. I was doubtful what to do, for it was impossible that we could push far through the valley if it remained the same; but fortunately the men seemed to think that I should go on at any price, and finally we came to better and steeper ground.

The ascent now followed the river we had crossed in the morning, and to walk along its stony path free from the terrible heath was a relief indeed. After a time we climbed out of the valley and traversed along the southern slope, and it was obvious that the men were getting very tired, as the chief was continually pointing out white blocks of quartz on the different slopes as snow, knowing that snow was what I wished to reach. I had no idea where we were, for all above was draped in heavy mist, and finally the chief came to me and said that we had better turn up at once and ascend the slope we were on. I had doubts about this, however, as I did not think we had travelled far enough to the west. But, fortunately, while we talked the clouds parted ahead, and right in front of us there appeared dimly the huge form of a snow-peak. I therefore descended rapidly to the floor of the valley, and, following it up, came to another steep step, up which the men climbed slowly and with difficulty, and finally one of the Swahilis said he could go no more. I gave him brandy, and told him to rest where he was for a time,

Omari carrying his load. We then got over the step into the upper part of the valley and, a few hundred yards further on, found shelter and a camping-ground under an immense overhanging cliff of schist. There was plenty of firewood, and we tried to keep warm, but the thermometer stood at 30°, and, in spite of all we could do, it was bitterly cold. The sun was now setting far below, sending a wild red glare over the clouds, which had again descended on the peak. But just before it set the clouds dissolved and rolled away, disclosing a splendid pink mass of rocks and snow immediately in front of us, the summit of which appeared to be about two miles away and some two thousand feet above where we stood. This peak eventually turned out to be that of Ngomwimbi, and I obtained the photograph of it, given on p. 233. Later on the moon rose, and the view of the crest of the mountain grew again brilliantly clear, the dark crags and snow-patches glittering with a strange brilliance of contrast in the blue frosty light.

CHAPTER XXI.

> "Over the Mountains of the Moon,
> Down the valley of the shadow."
> —EDGAR ALLAN POE.

I AWOKE next morning very stiff and cold; white frost was on the leaves and on the ground about us, and I quickly found that I myself was very hungry indeed. I therefore proceeded to look for the cook, whom I could not find for some time, among the heavy heath trees. I stumbled over him at last, however, lying on his back, quite naked, and snoring loudly by a red fire. We made a large breakfast of a sheep we had killed the night before, and a goat, to which I added sausages, jam, and delicious water from the river, and then started once more along the valley. The morning was cloudless and the sunshine was pleasantly warm as we passed out of the deep cold shadow of the rocks. After proceeding for a considerable distance up the valley, the nearer ridge of Ingomwimbi shut out the snow-fields from our view immediately in front, and we found that there was another step in the valley, two or three hundred feet in height. Going, however, was now easy among the mosses and the strange gigantic lobelias and groundsels. The vegetation was becoming thin, and there were no more doubtful places to be crossed. Omari was some distance ahead of me with Mr. Bagge's boy, and when they reached the top of the

step together, I saw them calling to me to come up and look. When I reached them I found that we had come suddenly upon a most surprising view. The valley swept round the face of Ngomwimbi to the right, and, steeply enclosing this extension of it on all sides, rose the huge buttresses of the snow peak of Kanyangogwi and of a northern snowy extension of Ngomwimbi itself. The

The wreck of our dhow on the Victoria Nyanza. The Sultan of the island watches the salvage operations under an umbrella. Another view.

valley, in fact, ended in a great snowy horseshoe, which was dazzlingly white and beautiful, and from these snow-fields I now saw, to my intense surprise and delight, that there descended three superbly green glaciers, the snout of one of which pushed far into the valley. So there were glaciers on these mountains, and there are probably many of them descending from other faces of the great

peaks, into numerous valleys which have never yet been entered by any European. After contemplating the glorious snow-fields for some time, I tried to determine where we now were, and what would be most profitable in the way of a further ascent. It was obvious that the particular crest of Ngomwimbi which we had seen from our camp the night before, and the snow ridge which was now facing us at the end of the valley, were both portions of the same mountain; and it also became obvious that these snow-fields formed what appeared to be the higher snowy peaks among the central mass of mountains which we had seen from the Albert Edward plains. There were now visible patches of snow on a level with and below us, on the mountains which form the outer summits of the great central group. We had, in fact, travelled along the northern face of one of these, and it was now seen to be separated from the greater crests of Ngomwimbi by a deep valley running north and south.

The crests and ridges of Ngomwimbi were seen to be separated from those of the northern groups of peaks associated with the mountain known as Kanyangogwi by a deep cleft, and in this a glacier descended almost to the floor of the valley. That part of Ngomwimbi, which we had seen from the camp the night before, formed an angle with the ridge which now faced us at the end of the valley, and in this angle the smallest of the three glaciers which we had just discovered fell towards an obvious moraine. Further along the ridge a much larger mass of ice descended towards the valley, giving off a stream which fell in a beautiful cascade into the valley itself. By carefully examining the face of the ridge in front, I came to the conclusion that it would be impossible to ascend by the glacier on the right, or yet by the small glacier on the left;

but it appeared that there was a practicable ascent towards the central glacier, by first moving up to the left, then crossing the base of the glacier itself, and afterwards working along a rocky ridge, first to the right and then to the left, on to the top of the ridge. I had thus two or three courses open to me. I could either ascend at once the lower portions of Ngomwimbi, which we had seen the night before, and, by working back somewhat along the valley, attempt the ascent of that portion of the summit; I could cross the valley bodily to the north, and work up over the steep brown lichen-covered rock faces of Kanyangogwi to the snow-fields which now appeared above them, or we could pursue our way up the valley and ascend by the glaciers, on to that particular summit of Ngomwimbi which the natives call Sitchwe. I wanted to visit the glaciers which we had just discovered, and I therefore decided for the latter. We moved on nearly to the end of the valley, and then struck straight up the steep slope to the left. Here after a short time we got into difficulties, coming upon some precipitous gullies, which we found it necessary to work round for a considerable distance. Finally, however, we got above the bad places and then climbed steadily on, until we reached some old moraines, which we crossed; moving out thence towards the cascade which came from the glacier itself. Below us, and above us, and around us the rock faces were ice worn, rounded, and scratched, and it was obvious that heavy ice had at one time extended much further down the mountains than it does at present. We were here, in fact, encountering phenomena which are precisely similar to those which have been observed by Gregory and others upon Mount Kenia.

We were now at an altitude of 13,400 feet; snow was lying about in patches, and in some places far below; we

were also now getting clear of all vegetation except a little moss, and I moved as rapidly as possible towards the waterfall, for clouds had gathered on the snow-fields above, and this part of the ascent looked as if it might become hazardous if we missed the way. We had hardly got within two hundred yards of the water, however, and were moving along over an awkward rock-face, when, without any warning, the mist rushed down upon us, and for some time we were in a very unpleasant situation indeed. It was intensely cold, fine snow was falling, and we were struggling apparently nowhere on the smooth ice-worn edge of a fearful precipice that sank into the valley sixteen hundred feet below.

The roar of the waterfall was deafening, and I found it also most unnerving in the white impenetrable shroud in which we were now enveloped. I therefore struck up towards the glacier without crossing the stream, telling the men to follow, which they did. We were now slowly scrambling up over wet rocks and patches of snow. The men were shivering, and I was afraid the Swahilis might die; but once more, without any warning, the clouds sank suddenly below us, and in a flood of warm sunshine we saw that the bluish caverned base of the ice was about one hundred yards in front. I halted beside it, and called to the men to come and eat some. The Swahilis would not touch it for some time, but after I had eaten a piece they tried also, grinning with the fierce cold. One boy, in fact, picked up a large piece and wrapped it in his cloth, with the intention of taking it back with him to Ujiji. The ice lay in huge blocks, which had fallen from the face of the glacier, all round us, and while we were there ice and stones came thundering down in showers as the warm sun played on the fields above.

From where we stood it looked possible to ascend along the north end of the glacier, but while I was debating with myself whether to follow this route or follow out the longer one, which I had already planned, to the right, a sudden squall came on ; the wind rushed down off the ice,

Over the great Nyanza swell.

filled with fine driven snow, causing a general stampede among the half-naked men. They ran down the steep rocks nearly to the top of the cascade, crossing the stream, and finally took shelter under some huge rocks, where there was a quantity of moss and dead herbage. With these we lighted fires, and I put up what shelters I could with stones and moss, the Ujiji boys being far too cold to

do anything for themselves. It was now about eleven o'clock, and I immediately left this our final camp, striking up across the rocks alone towards the point I had seen from the valley below. As I crossed the snow-fields of the slope above there was a glorious view of the snowy peak of Kanyangogwi to the north. It is very high and precipitous, and on the west, drops in a succession of fearful precipices, above which, near the top, huge masses of snow were hanging as if by a single hair, until they should finally topple over, as others had done, into the green valleys thousands of feet beneath, each leaving a great blue rent in the treacherous white slope above. Hundreds of glittering white heaps of snow had also fallen from this peak upon the small glacier to the north, now far below me.

Looking towards the south-west as I neared the final ridge, the view remained completely shut in by the black snow-streaked precipices of Ngomwimbi, and, advancing further, I came upon a stratified mass of ice and snow several hundred feet in height, which lay against some rocks to the south. This was the final ice-cap of the ridge, and in general it appears to be the case that the ridges and peaks in the Mountains of the Moon are more correctly described as being capped with ice than covered with snow. It was obvious from where I stood that the last part of the climb on to the ridge was going to be very awkward and steep. I therefore took a boiling point observation where I was, which gives the altitude as 13,702, and this observation was repeated with approximately the same results next day. I then left the hypsometric apparatus on the snow, and took with me for the further climb only an aneroid, a rope, and an axe. It was a very steep and awkward ascent, and I should say almost impracticable for one man,

unless, as at this time, much fresh snow had fallen, filling up the irregularities, in the ice and the rock, into a steep soft slope. In several places I had to take alternately to the rock and the ice, but at last the rock became better, and I finally got out on to a small patch of snow, under a mass of rocks which stood about ten feet above me on the left. It was the top of the ridge, but there was nothing whatever to be seen. The snow sloped gradually away to the west and on both sides of me, while a furious cold wind and mist came rushing from the Semliki side. Having reached this point on the ridge, I had therefore now accomplished all that I had set out to do. I had reached the snow and ice for the first time on one of the ridges of the Mountains of the Moon. I therefore danced a wild dance on my narrow resting-place, set my aneroid for a differential reading, and began to descend slowly again to the lower snows. At the place on the snow where I took the confirmed hypsometric observations of 13,702 feet, this aneroid, which had become disorganised, as they nearly always do at great altitudes, stood at 15,400 feet, and on the top of the ridge gave a differential reading of 1,200 feet higher, which is probably approximately correct, and when, consequently, this is added to the hypsometric observation, it gives an altitude of 14,900 feet as the highest point I reached on the ridge. This of course only refers to the northern snow ridge of Ngomwimbi, and I have a strong impression that Ngomwimbi proper, Kanyangogwi and Saddle Mountains are all higher. I found the way down anything but pleasant; my hands were numb with the cold, and the superficial wetness of the snow and rocks had now in the afternoon frozen in places into an intensely slippery glaze, and I had several very unpleasant foretastes of being shot bodily over the ice-cap

on to the lower snows. Finally, however, I got down to the place where I had left the hypsometric apparatus and rested on the snow; whence I found my way down over the lower snow-fields into the camp just after sunset. Omari and Mr. Bagge's boy were, however, not there, and I found that they had gone out to look for me, being alarmed at my long absence on the upper part of the ridge.

From this place, after several days, we retraced our steps slowly to Fort Jerry, where I found Fergusson was much better, and in consequence I left immediately by myself with a number of men for the Albert Nyanza.

CHAPTER XXII.

"So the old order changeth, giving place to the new."

HAVING reached the Albert Nyanza, and having found that the fauna in that lake had the characters of the faunæ present in Kivu and the Albert Edward Nyanza, I had completed the projected survey of the African lakes, at any rate so far as those that occur in the great central valley of the continent are concerned. I had proved conclusively, and without any manner of doubt, that the marine fauna which characterises Lake Tanganyika does not extend beyond the old confines of that lake, which are still visible, some forty miles north of its present site. It had been found not only that they were not present in the northern extensions of the great valley in which Kivu, the Albert Edward and the Albert Nyanzas all lie, but also that they never had been present there, at least since the old lake deposits which are cut by the Ruchuru river, and the similar formations which are cut by the Semliki, were formed. We had thus disposed of any possibility that the marine fauna of Lake Tanganyika might be conceived as a peculiarity of the fresh waters of Africa in general, by which it might be supposed to differ in the character of its components from that of the fresh water population of any of the other great continents of the earth. This latter demonstration was in itself of considerable importance, for it had been held by several geologists, after the results of

the first Tanganyika expedition were published, that such might eventually be found to be the case, and that the seeming anomalous character of the Tanganyika fauna might prove, therefore, to be only an appearance, arising from our lack of knowledge of the nature of the faunæ which occur in the other great lakes of the same continent. This, however, we had, as I have said, found not to be the case. The marine fauna of Tanganyika is, so far as it is at present known, rigidly restricted within the confines of the great lake in which it was at first discovered; and as such it can only be viewed as a relic—as the zoological remains, in fact—of a departed sea. This being so, it becomes also obvious that the only tenable explanation of the relationships and the origin of this strange isolated marine relic is to be found in the extraordinary correspondence which I found to subsist between the shells of the marine molluscs which now live in Lake Tanganyika and of those of the old Jurassic seas. Tanganyika appears, indeed, to be either the remains of one of these old seas, or a basin into which the water of such an antique ocean and the animals that were in it, could directly find their way.

In any attempt at understanding the great features of the history of the African continent as a whole, the presence of these animals in the remote interior is thus of immense importance; for their existence there implies the progress of great terrestrial changes, and these changes in turn at once, so to speak, make hay of the older geological conceptions of the past history of this portion of the earth; that is to say, with the view that Africa is a continent which is almost unique in the permanence of its terrestrial conditions; that there have, in fact, been in Africa none of those oscillations of the earth which we are accustomed to associate with extensive volcanic activities.

This view of the stability of Africa as a land mass has originated partly at least through the manner in which we have become acquainted with its features. The high interior was explored, at any rate in a geological sense, primarily from the east; and the first effect of these explorations was to bring to light the fact that the country beyond the coast-line was destitute of any extensive aqueous deposits. It was a land apparently composed wholly of granitoid and eruptive rock, which was consequently, when speaking geologically, without a history. It was incomplete data of this sort which led Sir Roderick Murchison to formulate the view (which he published in the Presidential address to the Royal Geographical Society for 1852) that Africa was a continent which was unique in the permanence and long preservation of its ancient terrestrial conditions; that, in fact, as a land mass it was almost unique in its stability. Sir Roderick associated this quiescence with what was then thought to be the fact, namely, that south of the equator in Africa there were no volcanoes, nor any trace of those volcanic activities which we are accustomed to associate with the great movements of the earth.

This was in 1852, and it is perhaps not without its chastening effect to reflect that there was even then in existence, if the President of the Royal Geographical Society's knowledge had only gone far enough, a veritably smoking refutation of this view in the great active cones of the Mfumbiro mountains; and besides these more active protests there were also other silent, but no less eloquent ones, in the volcanic outpourings and volcanic activities about Tanganyika, and even as far south as a group of extinct cones on Lake Nyassa. Later on, fresh evidence of great earth movements was discovered in the

interior, more especially in relation to the valley in which Lakes Rudolph and Beringo lie, to the east of the Mao plateaux; and the information respecting this great valley and others like it, led finally to the association by Sues of a whole series of geological movements of almost unequalled magnitude. It was shown by this author that the valleys in which Tanganyika, Rukwa, and Nyassa lie, along with those of Kivu, the Albert Edward and the Albert Nyanzas, were connected in the north with those in which Lakes Rudolph and Beringo occur, on the other side of the Victoria Nyanza; and that the depression after the junction of its two southern ramifications pursued its way uninterruptedly through the chasm of the Red Sea, which is, in fact, a part of it, up the Gulf of Akabar into the Dead Sea, and finally broke up and terminated in the valleys of the tributaries of the Jordan. These valleys are everywhere associated with and formed by successive and gigantic faulting, whereby long strips of the land, often hundreds of miles in length, have been allowed to fall and sink between opposing lines of cliff. The trough-like valleys thus produced are of immense depth, and form the basins of numerous lakes. Quite independently of Lake Tanganyika and its jelly fishes, we have therefore now, from the geologists themselves, unquestionable evidence of the fact that Africa, instead of being a land of great stability, is one in which there have been local movements on a scale hardly equalled anywhere else in the world; and what is more, we find that through some of the latest geological exploration in the eastern series of these valleys, it has been shown that in all probability the movements which produced them have been in operation quite recently; while lastly, we have the numerous observations, which I myself have accumulated, relating to local upheavals and depressions of the floor of

the valleys of both Nyassa and Tanganyika, and which show that these movements are unquestionably going on still at the present time.

What, then, is the meaning of all this change in the shape and the configuration of the land in the interior of Africa which has gone on and is still going on? What broad effects has it produced in the past, and in what direction may it be expected to lead? It is of course at the present time, and in the imperfect state of our knowledge of the interior, impossible to form any detailed conception of the meaning of these gigantic earth movements; but it is nevertheless possible, and even desirable, that we should follow the evidence as far as it will take us, since even now it leads directly to conclusions respecting the nature and origin of some of the great physical features of the continent, which are entirely different from any that have been hitherto entertained.

If we examine a section of Africa from east to west, we find that the continent assumes, roughly speaking, the form of a great arch—an immense hog's back, in fact—and that the crest of the arch through which it is supposed that we have cut runs approximately north and south. On the top of the ridge, and running also approximately north and south, there are two immensely long and relatively very narrow cracks, in which the lakes lie in strings and chains, like rain puddles on the ridge of a gabled roof; and between these two cracks there is a high and more or less flat area, one portion of which is occupied by the Victoria Nyanza. Further, if we examine the coast of the continent on the east or on the west, we find that the land has everywhere risen, old beaches and elevated marine deposits being met with at considerable heights above the sea level, and far inland. If, on the contrary, we examine the floor

of the two great cracks which lie on the top of the hog's back, we see everywhere indications of gigantic faulting and the falling in and sinking of long strips of land relatively to the sides of these cracks.

If I bend up this paper by compressing its edges, it also becomes a curved hog's back just like the African continent; and if the top of this ridge were to protrude above a water surface, the coasts would gradually rise as the edges of the paper became crushed in. Earth movements of this kind are everywhere known to go on, and are associated by geologists with the crinkling and folding, the puckering and ridging, caused by the skin of the earth shrinking as the interior cools. Further, if this paper had a surface of enamel, or some other hard substance, the bending up in the middle would lead to cracking and cracks running along the top of the ridge, and thus repeat in miniature the cracks and the chasms which score the African continent from north to south. Thus the gross configuration of Africa, as it at present exists, can be understood as an expression, in one of its boldest forms, of those great earth movements which are associated with the cooling in space of the great interior mass of the globe. It has been produced by movements similar to those which have formed the Andes and the Rocky Mountains, the Alps and the Caucasus. The ridge of Africa is in reality a vast mountain chain; but it is one which is not like most other mountain ranges, the denuded relic of bygone activities, but one which has all the appearance of being in the beginning of its life.

We are, so far as I know, indebted to my friend, Mr. Scott Elliot, for the appreciation of the very obvious fact that in Africa there exists a great central mountain chain, which runs from the Mountains of the Moon in the north, to the wild rocky summits of Mlangi, fourteen hundred

miles away, in the south. I have travelled over and along the whole of this ridge, but nowhere was there a break in the immense series of mountain masses which flank the lake valleys to the east. Everywhere along the line there were ridges and summits, which towered up from ten to twelve, and finally to fifteen, thousand feet in height.

I therefore cordially agree with Professor Scott Elliot that the existence of this vast central range, which is nearly as high and quite as long as that portion of the Rocky Mountains which is contained in the United States, should be recognised by some comprehensive name, such as the Great Central Range; and I shall therefore, in this and future publications, speak of it as such. This range, and the hog's backing and humping of the whole continent with which it is associated, are, as we have seen, apparently the products of the earth movements, which in places are in progress at the present time; and we must come consequently to the conclusion that Africa, instead of being a permanent and rather uninteresting land-mass without a history, is one which has been—and, what is more, still is—undergoing the most intensely interesting physical changes; changes which, in fact, are comparable to, and probably not at all dissimilar from, those which produced the Alps in comparatively late geological times.

CHAPTER XXIII.

"Have you groped
Out wisdom in the wilds here?"
—SORDELLO.

IN the last chapter I have referred to the changes which have unquestionably gone on in the African interior in the past, and I also pointed out that there was direct and incontestable evidence to show that these changes are even at the present time in full swing. It may therefore not be out of place to refer in the present chapter to another series of phenomena, which have for a long time been most perplexing, but which, when rightly interpreted, appear to show, in an equally conclusive manner, the extraordinary impermanence of the terrestrial conditions of the continent in which they occur.

These observations have nothing to do with geology nor even with jelly-fish. They relate to certain features of the flora of Central Africa, which, when first encountered, are utterly perplexing, and seem to indicate the past or present operations of a landscape gardener who is not there.

If we were to land now on the banks of the Upper Shiré river, we should find, after pushing our way through the reeds and the growths which fringe the waterside, that we had entered a country having, for all practical purposes, the character of a park. It is made up of wide lawns of short grass, in which there stand clumps and isolated

specimens of different forms of trees. These trees are not crowded together, but are grown just as they are in a piece of English park-land, so that they can be seen to the best advantage, with wide open spaces in between. The whole scenery in such a place is so peculiar and so artificial in outward aspect, that I cannot perhaps describe it better than by saying that it bears a very remarkable and close resemblance to that area of kept ground which is known as the Arboretum in the Royal Gardens at Kew. There is no tangle, no forest, the scenery is delightful; is extremely beautiful, in fact, so much so, indeed, that could it be divested of its sweltering tropical concomitants, I am inclined to think these natural parks, when compared with those of the landscape gardener at home, would be generally admitted to be the more pleasing of the two.

Unnatural looking park-lands of this description are very characteristic of vast areas in the interior, and they have, in consequence, naturally attracted the attention of many explorers besides myself. Thus we find Stanley and Stuhlmann, Emin Pasha and Cassati, Joseph Thomson and Sir Harry Johnstone, all drawing attention to the existence and peculiar appearance of these parks.

As a matter of fact they cover very wide areas of tropical Africa both in the interior and on the coast. Thus I myself have encountered them on the plains behind Beira, on the great alluvial plains bordering the Zambesi river, on the similar flats flanking the Lower and Upper Shiré river, all over the great plains surrounding Lake Shirwa, on the alluvial flats and plains bordering Lake Nyassa, to the east, to the west, and to the north. They appear again in many places on the high interior plateau between Nyassa and Tanganyika; they cover extensive regions of old lake deposits on the shores of Tanganyika itself; while

they reappear on the plains south of the Albert Edward Nyanza. They are to be found again in patches mixed up with the true forest, all along the course of the Semliki valley, and on the shores of the Albert Nyanza. They are further to be found on old lake deposits and alluvial flats in some parts of Uganda; and I am informed that they are also a characteristic feature of many portions of the West Coast of Africa, and of the hinterlands beyond it.

Park-lands, districts having the peculiar characteristics of a kept park, thus cover immense areas in the African interior. They cover, as a matter of fact, thousands upon thousands of square miles, and the more closely we examine them the more curious and perplexing their existence appears.

We have indeed only to look for an instant at a district such as that to which I have alluded on the Upper Shiré river, in order that a variety of questions shall present themselves which are all more easily put than answered. In the first place, why have these districts assumed the characters of an artificial park? Why are the trees isolated as if they had been grown for show? Why is there no thick bush covering the ground, converting the whole place into a thick jungle? Why are there so many different sorts of trees?

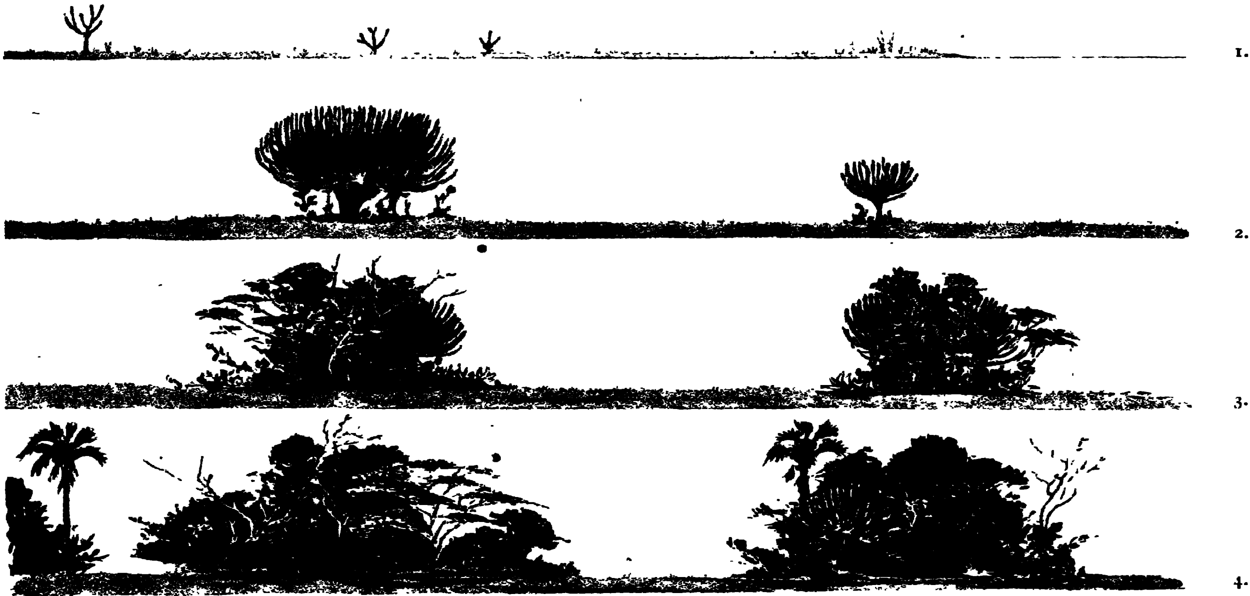
If we meet with a park in England, the mere fact of its existence implies the present or past operations of a park-keeper or a landscape gardener, who was not only an agent independent of the natural environment of forest trees, but who was also an intelligent man, in that he had the bushes and the brambles cleared and kept off the lawns, in which he planted great trees and little trees, so that their limbs and foliage could grow luxuriantly and be seen. Moreover, in England, when such a park has been

once formed by the agency of man, it is absolutely necessary that the operations of the gardener should go on and continue, or the park will inevitably and quickly lose its artificial character. Thorns and briars and bushes will quickly spring up upon the grass, and in a few years the park will have gone back again to what we are accustomed here to regard as a state of nature; or, in other words, it will have become converted into a trackless waste of old and young forest. In England or Europe a park-land is thus an artificial product, and is an impossibility, unless there is someone ready and willing to hold the natural tendencies of the vegetation in check. In tropical Africa, on the other hand, precisely the same arboreal arrangement is produced, but no human agency has had anything to do with it; and the existence of these natural park-lands presents us with a ready-made and an extraordinary puzzle which it is interesting to try to understand.

In attempting to account for the appearance of park-lands, the most natural supposition to make is of course that of inequality of dampness or character of the soil, which is sufficient to allow some kinds of trees to grow in one place, some in another, and grass in between; but although this view of the matter looks very nice and promising at first sight, its value is absolutely destroyed by the facts of the case. I have on several occasions when in a park-land set my men to trench and dig in different directions, and then examined the soil, with the result that I could find no difference whatever either in its dampness or its consistency, at least any that it was possible to correlate with the different plants that grew upon it. In the soil under a great clump of acacias there was as little moisture, and it was of the same consistency, as that upon which there was nothing but a scanty covering of grass; neither can

difference of climate or rainfall be invoked. Park-lands occur in the Semliki valley, where it is very wet, and also on the Albert Edward plains, where it is very dry.

From general observations, however, it soon becomes apparent that park-lands are by no means distributed hap-hazard over the surface of the country; they never occur, for example, on hill sides or upon rocky ground. They are invariably found upon alluvial plains like those formed by rivers, or upon old lake deposits; that is, they invariably occur on flats made up either of blown sand or of ground of aqueous origin; but although they are thus invariably related to flats of the above sorts, this fact at first sight perhaps makes the whole matter more perplexing still, for such flats are by no means invariably covered with parks. Thus there are wide districts on the Semliki flats which are covered with heavy forest, and there are similar alluvial areas covered with heavy forest only along the Zambesi river, and indeed in many places elsewhere. What can it be, then, which in some places inaugurates and maintains a natural African park? This question is a great puzzle, and the answer to it is not at all apparent upon the surface of things. In fact, I have sat for months in these regions looking at their strangely artificial aspect, until I became filled with a sort of impotent wrath; for do what I would, I could find no satisfactory explanation of the very peculiar features which they present. What, however, I have every reason to believe to be a clue to the whole matter, was obtained during my visit to the Albert Nyanza. On that journey I descended from the western slopes of the Mountains of the Moon on to the plains of the great central valley, which I crossed diagonally until I reached the lake itself. On this series of marches we passed off the mountain slopes on to plains of alluvium and old lake



Semi-diagrams. Illustrating the formation of "Park Lands" by the growth of euphorbias on recently-formed alluvial flats. (1.) Shore of the Albert Nyanza with reeds and a few young euphorbias springing up. (2.) The euphorbias form a spot of shadow in which more delicate plants survive. (3.) Euphorbias becoming buried in the bush which they originally sheltered. (4.) The euphorbias choked with bush, and the formation of typical park lands. The figures run from right to left.

deposit, in which there are the remains of fresh water shells, similar to those which still live in the lake itself; and from this, it is obvious that the lake once extended over these regions, which are now covered with thick forest of different sorts. As we neared the lake we passed out of the forests, first into park-lands and then over steppes, with only a very few trees, and finally on to the absolutely treeless salt wastes bordering the shores of the Albert Nyanza. We were travelling over the old lake deposits all the way, and the shelly remains became fresher and fresher, until we actually reached the shores of the lake itself. Further on the western shores of the lake we found old watermarks and beaches, which show in as conclusive a manner as the old lake deposits and shells to the south that the lake has steadily fallen and receded to the north during a number, but an unknown number of years. From this it will be obvious that in our marches from the Mountains of the Moon to the shores of the Albert Nyanza, we were passing over land which had been covered with water at a more and more recent date, and conversely, as we returned over the road we had come, we were passing over land which had been land for a longer and longer time owing to the gradual northern recession of the lake. The difference in the character of the vegetation encountered during the progress of this journey has been represented in the figure on page (321), which is a combination in sequence of a number of drawings and photographs of the kinds of vegetation through which we passed. By the lake shore there was a belt of reeds, and beyond this almost desert salt steppes, over which the fierce tropical sun blazed without any protection for many hours during the day. In such places the noon-day heat is fearful, and the men on this particular occasion, as is often the case on exposed

plains near the equator, were hardly able to walk with their bare feet on the hot ground. The surface of the earth was desiccated and sandy, but a few inches below there was an appreciable amount of moisture, due to the occasional storms which sweep over these plains, and disappear almost as quickly as they form. Nothing but grass grew near the lake, and even this evidently had a very bad time, for it was scraggy and white, and bleached and alternated with patches of absolutely bare sandy soil. On these plains there were, however, in places scattered over the surface of the ground, a few young euphorbia trees, the seeds of which had evidently been disseminated by the wind or birds over the plains; and as these hardy plants grew bigger on the older land further from the lake shore, I noticed that in the hot glare of the noon their massive structures threw a small patch of deep cool shadow round their feet. Further away from the lake, where the land was older and the euphorbia had consequently had time to grow proportionately bigger, the noon-day spot of shade had also correspondingly increased, and in the area of such shadow there were to be found a variety of plants besides the grass, which here found protection from the fiery glare and heat, and were consequently able to grow. Among these plants, struggling under the euphorbia shadows to withstand the adverse conditions of the plains, there were thorn trees, climbing plants, and flowering shrubs, and when once these plants had in this manner got a footing on the plains, they prospered like one of Germany's protected industries, and throve amazingly; so much so indeed that on land that was still further from the lake, and consequently still older, the thorns and bushes of various sorts were enveloping the euphorbias, which now appeared as rather choked growths in the centre of the bushy patches. Further away again

from the lake there were many clumps of bushes and trees scattered in all directions over the country; and in many of these there were still to be found the dead or dying remains of the original euphorbia, to the protection of which the bush patch owed its growth. The seven lean kine had, as a matter of fact, here eaten up the seven fat kine, and in such districts we entered the typical scenery of an African park.

Once started, the groups of trees and patches of bush which marked the graves of their former benefactors, the euphorbias, spread gradually under the protection of their own shadows, until finally the patches ran together and more or less coalesced into the ragged forest which covers the higher portions of these long alluvial slopes.

It will be obvious that we have thus, in the simple natural dispersion and growth of euphorbias over desert steppes and in their mode of growth, a completely satisfactory explanation of bush patches, park-land, and finally of real forest; the process of their formation being a natural sequence of events following upon the scattering, through the agency of the wind or birds, of the seeds of a single tree.

The appearance of a park-land is thus seen also to be one phase in a series of changes which follow the retreat and drying up, or the change in position, of water on the face of the land. And further, it appears to be as true of the natural park as of the artificial one, that unless it is kept up it must, in the course of time, disappear and become converted into more or less thick forest, for the appearance of a park, as we have seen, is simply the expression of progressive physical change. There appears to be no agency except a park-keeper which is capable of maintaining a park; and perhaps the most singular, at any rate the most

interesting, thing which the foregoing observations teach us, is that the African parks are absolutely impermanent, and are in reality direct and incontestable evidence in themselves of widespread physical changes in the lands on which they exist.

As a matter of fact, when a lake contracts within its own bed, or the positions of its shores are changed by other means, the exposed floors of mud and alluvium become first desert steppes, then steppes covered with grass and young euphorbias, then plains covered with euphorbias and bushy patches of trees, then park-lands, and finally complete forest. In the case of the Albert Nyanza, these different sorts of countries are arranged round the lake in successive zones, and are thus evidence which is incontestable, that the lake has receded not suddenly but gradually towards the north. But not only is the existence of a park-land evidence of recent change in any district in which it may occur, it is also indicative of change in one particular direction—that is, of the gradual drying up and shrinking of whatever lakes and open waters the district may possess. Hence the almost universal distribution of park-lands all over Central Africa is clearly indicative of one of two things: either the rainfall is becoming less over the whole of the equatorial regions, or the land is being gradually moved, and changed, and shifted, in such a manner that the water on it is being drained off the interior as a whole. There is no evidence of any decrease in the rainfall; and therefore we are driven to conclude that the existence of these extensive parks must be due to movements and shifting in the watersheds and the general configuration of the land. Now, the only direction in which earth movements on a slow and extensive scale could effect this draining is by that of a gradual raising and humping up of

the interior; and it is extremely interesting to find thus that the study of the features of natural parks leads exactly to the same conclusion respecting the impermanence of the terrestrial conditions of the interior that were indicated by the geological and physiographical considerations which I discussed in the last chapter.

These physical considerations, although they show that change has taken place, and, as we saw, through the presence of trees in the water of Nyassa, and from the fresh shells that are now elevated above Tanganyika, that these changes were still going on, do not afford any indication as to how fast such physical changes may be progressing at the present time. The relation of euphorbias to park-lands could, however, be made to throw direct light on this matter. Euphorbias, like other trees, have a definite average rate of growth, and if this average rate of growth were ascertained, we could speak with more or less certainty about the time occupied by the changes which have brought into existence any particular park. Unfortunately, the average rate of growth of these trees is not now known, but it would be quite well worth somebody's while to find it out, since, if we knew it, we should at once have a means of measuring the rate of progress of the extraordinary physical changes which are proceeding in Central Africa at the present time.

CHAPTER XXIV.

"And the end of it's sitting and thinking,
And dreaming hell fires to see."
—RUDYARD KIPLING.

WE have, then, been the round in the foregoing chapters, all the way from the steaming swamp lands of the Zambesi Valley northwards, through the Nyassa region, through that of Tanganyika, of Kivu, over the huge Mfumbiro mountains, through the great game plains south of the Albert Edward Nyanza, up the west coast of that lake and then away north of it, until at last we got out among the rocks, and the snow, and the high peaks, and the glaciers, of the sublime Mountains of the Moon. We have now turned east again, we have traversed the endless hills and papyrus swamps of Uganda, we have crossed the long oily swell of the great Victoria Nyanza, among its innumerable islands, until we climbed out of the lake depression across the great Moa plateaux, ten thousand feet up in the air. We have crossed the lesser eastern African trough, south of Lake Beringo and Mount Elgon, and have reached the long eastern slope of the continent. We have reached another of the great octopus-like arms of civilization, and are sliding down the long incline of the Uganda railway. We have passed the wild snowy peaks of Kenyia away to the north, and we are finally rumbling along through illimitable yellow plains, with the superb and lonely dome of

Kilimanjaro rising, blue and white and beautiful, away to the south. The journey is finished, and the end of it is sitting and thinking very much indeed; and so, lest this process should go on to the undesirable imaginings which are described as having afflicted the unfortunate soldier referred to in the lines which I have chosen for the head of this chapter, I have determined, at the imminent risk of offending a great number of people for whom I have the greatest esteem, to sketch briefly, but unreservedly, the opinion which I have been able to form of the great interior wastes as a whole. Our two journeys were particularly well adapted to this end; they covered an immense area of the equatorial continent, they lay through those higher interior portions which are unquestionably the best of it, and between the first and the second expedition there was a considerable lapse of time. Our actual journeyings in the interior, now I come to think of it, have occupied some three years. During their course we were not looking for any prospective loaves which the country might present; we were, as a matter of fact, concerned chiefly with a few small fishes. We were there without the missionary's faith in the black, or the faith of the administrator and trader in the inherent worth of his adopted country, and we had therefore no personal axe to grind, the sharpening of which might have interfered with any opinions we formed of the place and the people that were in it. In dealing with these two things, the people and their continent, perhaps the man comes naturally first; and there is not the slightest doubt that the question of this filthy, unsavoury individual is in every way a fearful one. He has not only all the above characteristics and a good many more which make him, in the literally true sense of the words, horribly funny, but he is also in possession of the soil; and last, but not

least, he is regarded by the majority of Europeans, not only as a man, but also as at least something like a brother. It is in this latter brotherly character that, as I pointed out in the first chapter of this book, the African native is so profoundly instructive, and in some respects such a very unpleasant object lesson for civilized man. Everyone admits that this brother of ours has, as the missionaries have never been weary of pointing out, many of those very human attributes which people in general affect to admire. He has none of the cringing false humility of the Indian coolie, he is no such extraordinary cross between a cowed dog and Uriah Heep. To a large extent he is, moreover, honest, and in the best sense of that term, for he is neither afraid of his own beliefs nor of the practical consequences to which they may lead him. He is, for example, firmly convinced that his womenkind are a nuisance, only to be provided for on account of their personal charms, and because they can cook his food and dig in his gardens. He is therefore no votary of the peculiarly angelic characters of the female soul; to the black man as to a latter product of civilization, recently described by a modern poet, "A woman is only a woman, but a good cigar is a smoke." He has next to no superstitions, not half so many as the ordinary white man; at any rate, they never lead him to devote any portion of his leisure at all comparable to that devoted by Europeans to the building and maintenance of the temples of their different religions. He has a curiously hard-headed habit of judging the value of things entirely by their practical results, and in consequence he does not believe, from a mundane point of view, that the extensive building of temples is good business. He believes to a certain extent in ghosts, in the ghosts of his ancestors, and he believes in the supernatural powers of certain evilly dis-

posed women. To propitiate the former, he builds little houses about as big as a beehive, and in these he places from time to time a small morsel of food; but if his ancestors' ghosts, when thus habilitated, do not make his worldly affairs prosper, he ceases to feed them altogether. To escape from the latter he uses much more drastic remedies, either poisoning the woman who has fixed him with an evil eye, or beating her with a stick, which is often a good deal thicker than that of a less diameter than a man's thumb, which it appears is still allowed by the English law for the purpose of wife-beating.

He is firmly convinced that the ways of the universe are dark and arbitrary, that the gods are as hard to reconcile as they have appeared to many nineteenth century European thinkers, and, like them, he consequently believes that the less one has to do with the powers that be, the more time he will have for lying on his back in the sun, for hunting, and talking at the top of his voice, and for the conduction of his own worldly affairs. In fact, he naturally exactly attains to that position of laboured agnosticism which was so forcibly put by Huxley, when he described the course of his own intellectual efforts as having "led nowhere but into the wild depths of a dark and tangled forest." The native, however, does not need to wander away from the beaten tracks of civilization in order to get into this wood; he is there already, both in fact and in fancy, nor does he have to consider what in his worldly experience he can liken to the lions and the leopards in a certain path. Both are there in actuality, and ever ready with tooth and claw to shriek against any soft-fashioned theory of the universe. Living as he does, and endowed with the peculiar mental attributes which I have just described, the native is a strange cast-iron man, as much stronger in his mental attributes than

the ordinary missionary (who, through a grim ironical humour in things, goes out to teach him) as he is in his hard, bronzed body. There is a story of a typical African chief, which I have heard attributed to Ketimkuru himself, but to whomsoever it did refer, it is very characteristic of the native mind. Some missionaries came into his country, and the naked old king, covered with charms against ghosts, and with brass and ivory bangles for ornament, sent for the strangers and enquired why they had journeyed into his territory; they told him that they had come to teach the black people about the white man's God, and that they wanted to build a school, in which to teach the children the way they should go. The king, however, made certain enquiries before he would allow any change in the established order of things, and he was singularly practical in his ideas.

He asked them in the first place whether, if his people learned about the God of the Europeans, the inherent evil in things would begin to depart? Whether the rain would fall in due season? and whether his people would still be afflicted with many forms of hideous disease? The missionaries could not assure him on these points; whereupon the king replied that he saw no use in the new teaching, and they had better depart.

With the native, as with the typical European of the nineteenth century, it is, in every way and in everything, a matter of pounds, shillings, and pence. He is what we call practical and philosophically negative, not as a result of a prolonged and expensive education, but because he has the immense natural advantage of being born so. In other words, he has by nature those very mental attributes which it has been the fate of the most acute European intellects, after centuries of labour, to attain. Like these more

thoughtful Europeans, the native has also in a high degree a natural incapacity for exhibiting any faith, as it is understood in an ecclesiastical sense. He looks at things as they are, and is entirely without that peculiar mental attribute, faith, which enables untrained civilized Europeans to believe those things which, in the absence of it, would be quite incredible.

But besides being thus a serious and most intensely

Omarii on his way home.

interesting object lesson for agnostic thought, the native is no less interesting from a social point of view. As he is agnostic by nature, it is perhaps not wonderful that in his social arrangements he has already long since almost completely anticipated those very ideals which the advanced thought of to-day seems to be desirous of seeing introduced once more into our own place and time; for the native is not only completely up-to-date in his negative philosophy, but he is also socialistic. In most native communities the

land belongs to the people, and these communities have actually realized that acme of some socialistic aspirations, of having the people on the land. Politically he is not ruled by hereditary despots, but by the great heart of his tribe, the chief having, except as a spokesman, and a figurehead, and a referee in cases of internal disputes, very little power indeed. There is no difference in social condition, and certainly very little extravagance in the mode of life of the people; the individual units making up the tribe live in filthy huts on the ground, and so does the king. They spend nothing on useless luxury; they are, in fact, almost as absolutely without clothing as Du Maurier wished that all European people were. Finally, their morality is also of a particularly advanced type, and their ethics closely resemble those advocated by Mr. Grant Allen, and which were described by Madame Grand as being similar to the ethics of the poultry yard. They are by no means afflicted by long hours or over work; they are not even burdened with an eight hours' day, two hours' gardening in the morning being sufficient to produce food enough for a whole family. It has long appeared to me, therefore, that instead of teaching the black to become a loafer in breeches, we ourselves might do a good deal worse than go and study the black; and therefore I am always minded to cry out, as I did in the initial chapter of this book, against the wanton destruction of these people; for they are the only existing relics of that time when all people lived in a state of nature, a condition which many enlightened thinkers, Rousseau among them, have affected to admire.

Turning now from the black man himself to the question of the black man's country, we must remember that, as Stanley so well said, there hangs still over the dark interior the glamour and the charm of mystery, which makes the

place inevitably attractive to many sorts of men. Thus, quite apart from the possible commercial value of these countries, almost anyone who is young enough and strong enough would throw whatever he might have in hand down and rush off there, whenever he got the chance. I should do so myself now, sport-loving men of every sort would, as well as the soberer kinds of travellers, for the African interior is still a wonderful place, and, as an instrument of culture for all sorts of people, far superior to any university. It would, as Mr. Grogan so aptly expresses it, even do untold good to acrid females, if they could be induced to go there. But the question with which we have just now to deal is not whether Central Africa can be used as a sort of dumping hospital for the neurotically afflicted, but rather whether it presents anything in the way of lands which are salubrious enough and rich enough to make it possible as a future seat of European colonization. It has, of course, been held, I believe it generally is held, that such is in reality the case; that once beyond the unhealthy coast-lines, the elevated interior is high enough and cool enough for European people to go and live there among their plantations and their flocks and herds. We have all read Sir Harry Johnstone's description of Blantyre and the Shiré Highlands, and of the extreme civilized prosperity and delight of everybody there. We have also read Mr. Scott Elliot's wonderful statement that young Scotchmen can go and grow coffee there, and after a few years return with a competence for life. And when we read these things, and then go out and look at these places as they are now, we can, I think, only feel unmixed admiration for the artistic faculty and literary skill which has woven so many beautiful dreams round the present and the future of countries which have, and have in an obtrusive manner, the baleful

attributes of a cemetery. With respect to the fortunes which are said to be waiting there for young men to go and pick up, it is equally delightful to find that sober-minded people, like my friend Mr. Scott Elliot, can have confidence in these things, as it is irrefragable evidence of the truth of the beautiful old adage, that "Hope springs eternal in the human breast."

But to return to our own particular investigations, it may be remembered that on the present journey we entered Africa through the mouth of the Zambesi river in a profound morass; that we journeyed for hundreds of miles through what a schoolboy would call unmitigated and unsavoury splodge; that the people hereabout died, and had died, and that their successors died again; that a malarial commission was sitting on the subject of their deaths, and that instead of the malarial commission settling the "fever bugs," the same redoubtable parasites nearly settled the malarial commission.

Later on in our journey we came to a hilly country covered with stunted trees; we reached, in fact, the Shiré Highlands, in which there is much rock, and the country, from being composed of universal splodge, becomes a country diversified with rocks which stick up out of splodge.

From this region we went for many days through marshes and morasses unspeakable, holding our noses and blaspheming until we came to Lake Nyassa, where almost everyone was dead that I had met there on my former expedition. We here entered a beautiful warm lake region, surrounded with shore swamps fringed with mountains, so steep and so rugged that on crossing the swamps in any direction we were immediately confronted with austere precipices. We got out on the top of these on the way to Tanganyika, and found ourselves in a succession of arid,

leafless wildernesses, covered with European graves, and sans everything in the way of either comfort or necessity. And then again we descended into the valley of Tanganyika itself. On the shores of the lake people have died, are dying, and will die; they go on, or rather they go off, there actually faster than they do in the Nyassa region. The English lament their comrades, who as they say are planted all about the place, the Belgians do the same, and the Germans follow suit.

After leaving Tanganyika we ascended once more and came into the curious Kivu land, high and cool and charming as a work of art, but of the health of which no tale has yet been told, except the authenticated death of a German sergeant, who had lived up there, 5,000 feet in the air, for more than a year before he departed, seized with blackwater fever, the worst type of African fever that there is.

Beyond Kivu there are the long fiery plains south of the Albert Edward Nyanza, and north of this again, and once more rising out of profound splodge, there are the towering and isolated ranges of the Mountains of the Moon. Still north of these there are the vast unexplored, unmapped swamp wastes of the Upper Nile, but which, wherever they have been crossed, are described as dancing with heat and literally humming with millions of mosquitoes. Eastward again, we have the questionable entity of Uganda, and westward the gradual descent into the endless Congo swamps.

Nowhere in this vast interior, along any of the thousands of miles of route over which I have travelled, have I ever come across any places at all comparable to the very worst districts in New Zealand or the Far West of America.

When low, the country is enervating, fever stricken, and

hot; when high, wild, changeable, and wet. Can anyone who has been in Equatorial Africa name a single place anywhere, where he would like to go and live, and where he thinks he could make farming pay in any other sense than that of providing him with food stuffs until he died of fever.

We hear of course of merchants, and agents, and residents of various sorts in the interior, in Uganda for example; but with the exception of the departed ivory trade, what have the dreary storm-swept plains and steaming lake shores of this place ever produced that would pay to send even as far as the head of the railway? There is nothing. The agents and the merchants live by providing for the needs of the members of the European governments, which "cherish the black," the missionaries who teach him, and the travellers who come to look at him; but out of the place where all this cherishing and teaching and observation goes forward, there comes absolutely nothing of a paying kind.

I have no quarrel with the now much administered native; he is, as I have said, being converted at enormous expense and trouble, from being a charming relic of the past, into a pauperised fool, and this, for all I know, may be the thing at which an enlightened civilization ought to aim. What I am not so sure about is, whether, if the results of the process were understood by the European publics who pay for it, there would be much chance of its going on.

People have, however, sublime faith in the African interior; so much so that, even if its health and its climate turn out not to be what they should be, they feel confident that at the worst there will be minerals. Faith unquestioning can work marvels; it has been said that it is strong

enough to move mountains, but judging from what I have seen, and from the reports of others, I am convinced that this is the sort of work it will have to do, in Equatorial Africa, before we get at the minerals, for they are not generally apparent on the surface.

This curious faith which exists respecting the value of the Equatorial African interior as a colonial asset is not, however, difficult to understand. We have only to study the history of our knowledge of Africa to see how in all probability its existence has been brought about.

There is the old story of the West Coast gold coming as it did from a country that was known to be vast, but of which nothing more was known.

There was then the development of South Africa, and the discovery there by white people of a country with a climate more beautiful and more salubrious perhaps than that of any other part of the world. In the more remote hinterlands of the south there were ultimately found gold and diamonds, and the sleepy colonies woke up into a roaring prosperity only equalled by that of the Australian and Californian gold centres.

Still further inland there lay the vast interior under the tropics, the coasts of which were known to be hot and unhealthy, but inland the continent was found to be well watered and high; it was teeming with game and it was filled with mystery. Altitude brings back the chill of temperate climates even under the equator, and therefore it is hardly to be wondered at if the people of Europe regarded the vast African interior as a promised land. Unfortunately, however, as we have too much reason to know, altitude does not repeat the conditions of latitude. The climate about the snow-line on the Mountains of the Moon is as cold as that of a London January, but it is very

far indeed from being in any way the same. The correspondence is between the temperature only; in other ways it is merely superficial, and not real.

The dream, however, has borne fruit; European civilization is going to force its way into the hot dark forests and the bare scorched steppes of the interior. We are going to spend millions on one more huge gamble, and we shall see what the bubble of the interior will bring forth. It is, after all, the unexpected which often happens; the result is in the hands of time. Civilization, sitting in its European capitals, believes in the possibility of opening up the interior as a paying concern, and it may therefore be not without use, or without interest, to record the fact that there were certain obscure travellers who had not remained at home, but had wandered through the interior, far and wide, and knew much of it quite well at the end of the nineteenth century, but who were not of that opinion.

Nearing the East Coast of the Victoria Nyanza.

MAP OF THE GREAT AFRICAN LAKES

Rift valleys & depression of the Congo

Route of the Tanganyika Expedition - - - - - -

Mountain Chains

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